

SyncMaster

SERIES **3** | TA350

SERIES **5** | TA550

LED TV MONITOR

(MFM TV)

user manual

imagine the possibilities

Thank you for purchasing this Samsung product.
To receive more complete service, please register
your product at
www.samsung.com/register



Figures and illustrations in this User Manual are provided for reference only and may differ from actual product appearance. Product design and specifications may be changed without notice.

Still image warning

Avoid displaying still images (such as jpeg picture files) or still image elements (such as TV channel logos, panorama or 4:3 image format, stock or news bars at screen bottom etc.) on the screen. Constant displaying of still picture can cause ghosting of screen, which will affect image quality. To reduce risk of this effect, please follow below recommendations:

- Avoid displaying the same TV channel for long periods.
- Always try to display a full screen image.
- Reducing brightness and contrast will help to avoid the appearance of after-images.
- Use all TV features designed to reduce image retention and screen burn, refer to proper user manual section for details.

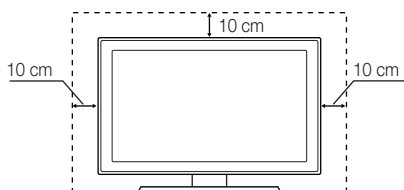
Securing the Installation Space

Keep the required distance between the product and other objects (e.g. walls) to ensure proper ventilation.

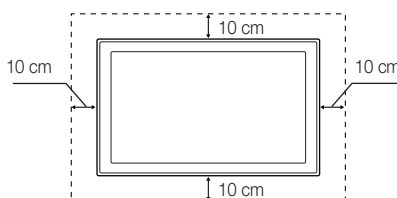
Failing to do so may result in fire or a problem with the product due to an increase in the internal temperature of the product.

- 🔧 The actual appearance of the TV may differ from the images in this manual, depending on the model.
- 🔧 Be careful when you touch the TV. Some parts can be somewhat hot.

Installation with a stand



Installation with a wall-mount



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Check the Symbol!



TOOLS

This function can be used by pressing the **TOOLS** button on the remote control.



Note

Indicates additional information.



Step by Step Guide

Check here for instructions on how to open the relevant submenu within the OSD (on screen display).

Getting Started

Safety Precautions

Icons used for safety precautions



WARNING

Failing to follow the precautions marked with this sign may result in a serious injury or even a fatality.



CAUTION

Failing to follow the precautions marked with this sign may result in a personal injury or property damage.



Do not perform.



Must be followed.

CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). THERE ARE NO USER SERVICEABLE PARTS INSIDE. REFER ALL SERVICING TO QUALIFIED PERSONNEL.



This symbol indicates that high voltage is present inside. It is dangerous to make any kind of contact with any internal part of this product.



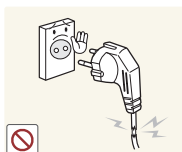
This symbol alerts you that important literature concerning operation and maintenance has been included with this product.

Power Related

 The following images are for your reference and may differ depending on models and countries.



Warning



Avoid using a damaged power cord or plug or a loose power outlet.

- Otherwise, it may result in electric shock or fire.



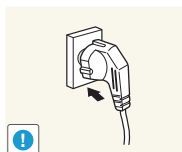
Avoid connecting multiple electric appliances to a single wall outlet.

- Otherwise, it may result in fire due to overheating of the wall outlet.



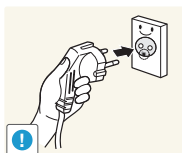
Avoid plugging in or unplugging the power supply with wet hands.

- Otherwise, it may result in electric shock.



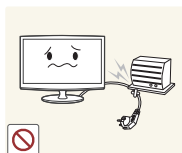
Plug the power plug in firmly.

- Otherwise, it may result in fire.



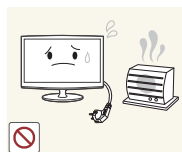
Make sure to connect the power cord to a grounded wall outlet (for insulation class 1 equipment only).

- Otherwise, it may result in electric shock or injury.



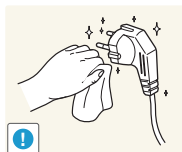
Avoid bending or twisting the power cord excessively and avoid placing heavy objects on the cord.

- Otherwise, it may result in electric shock or fire due to a damaged power cord.



Keep the power cord and the product away from a heater.

- Otherwise, it may result in electric shock or fire.

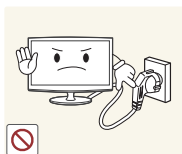


If the pins of the power plug or the wall outlet are covered in dust, clean it using a dry cloth.

- Otherwise, it may result in fire.

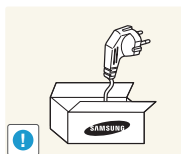
Getting Started

⚠ Caution



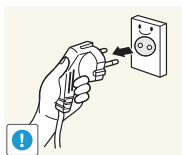
Avoid unplugging the power plug while the product is operating.

- Otherwise, it may damage the product due to electric shock.



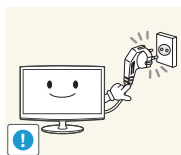
Make sure to use only the power cord supplied by our company. In addition, do not use the power cord of another electric appliance.

- Otherwise, it may result in electric shock or fire.



When unplugging the power plug from the wall outlet, make sure to hold it by the plug and not by the cord.

- Otherwise, it may result in electric shock or fire.

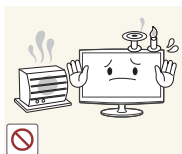


Connect the power plug to a wall outlet that can be easily reached.

- When a problem occurs with the product, you must unplug the power plug to cut the power off completely. You cannot cut the power off completely using only the power button on the product.

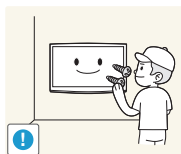
Installation Related

⚠ Warning



Avoid placing burning candles, mosquito repellent or cigarettes on the product.

- Otherwise, it may result in fire.



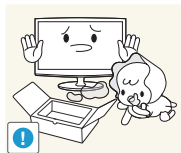
Ask an installation engineer or relevant company to install the product onto the wall.

- Otherwise, it may result in injury.
- Make sure to use the specified wall mount.



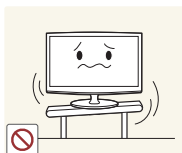
Avoid installing the product in a badly-ventilated location such as inside a bookshelf or closet.

- Otherwise, it may result in fire due to internal over-heating.



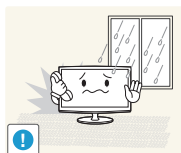
Keep the plastic bags used to pack the product away from children.

- If children place the plastic bags over their heads, they may suffocate.



Avoid installing the product in a location that is unstable or exposed to excessive vibration such as on an unstable or slanted shelf.

- The product may fall and this may result in damage to the product or injury.
- If you use the product in a location exposed to excessive vibrations, it may result in a problem with the product or fire.



Avoid installing the product in a location exposed to dust, moisture (sauna), oil, smoke or water (rain drops) and installing it within a vehicle.

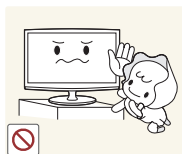
- This may result in electric shock or fire.

Getting Started



Avoid installing the product in a location exposed to direct sunlight and installing the product near a heat source such as a fireplace or heater.

- This may shorten the product life cycle or cause fire.



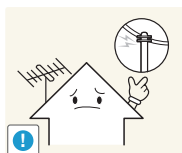
Avoid installing the product where children may reach it.

- If a child touches the product, the product may fall and this may result in injury.
- Since the front part is heavier, install the product on a flat and stable surface.



Bend the outdoor antenna cable downwards at the location where it comes in the house so that rainwater does not flow in.

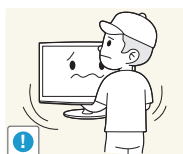
- If rainwater enters the product, it may result in electric shock or fire.



Install the antenna far away from any high voltage cables.

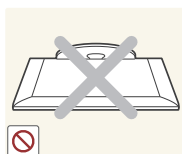
- If the antenna touches or falls onto a high voltage cable, it may result in electric shock or fire.

Caution



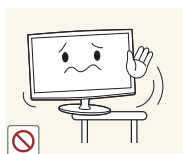
Do not let the product drop while moving it.

- This may result in a problem with the product or injury.



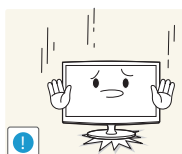
Do not place the product face down on the floor.

- This may damage the panel of the product.



When installing the product on a console or shelf, make sure that the front of the product does not protrude out of the console or shelf.

- Otherwise, this may cause the product to fall off and result in a malfunction or injury.
- Make sure to use a cabinet or shelf suitable to the size of the product.



When putting the product down, handle it gently.

- Otherwise, it may result in a problem with the product or injury.



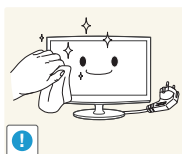
If the product is installed in a location where the operating conditions vary considerably, a serious quality problem may occur due to the surrounding environment. In this case, install the product only after consulting one of our service engineers about the matter.

- Places exposed to microscopic dust, chemicals, too high or low temperature, high humidity, airports or stations where the product is continuously used.

Getting Started

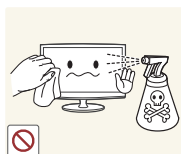
Cleaning Related

Warning



Before cleaning the product, unplug the power cord.

- Otherwise, it may result in electric shock or fire.



When cleaning the product, do not spray water directly over the product parts.

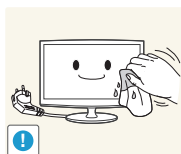
- Make sure that water does not enter the product.
- Otherwise, it may result in fire, electric shock or a problem with the product.

Caution



Avoid spraying cleansing agent directly onto the product.

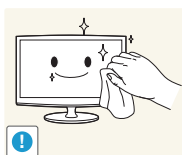
- This may result in discoloration or cracking of the exterior of the product or the panel coming off.



When cleaning the product, disconnect the power cord and clean the product with the supplied cleaning cloth.

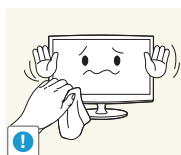
- Avoid using chemicals such as wax, benzene, alcohol, thinner, mosquito repellent, fragrance, lubrication or cleansing agent when cleaning the product.

This may result in the exterior being deformed or the print being removed.



If you can't get the product clean with just the supplied cloth, use a soft, damp cloth with a "monitor-exclusive cleansing agent" and wipe the product with it.

- If no monitor-exclusive cleansing agent is available, dilute a cleansing agent with water at a ratio of 1:10 before cleaning the product.



Since the exterior of the product is easily scratched, be sure to use the supplied cleansing cloth.

Usage Related

Warning



Since a high voltage runs through the product, never disassemble, repair or modify the product yourself.

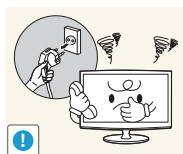
- Otherwise, it may result in fire or electric shock.
- If the product needs to be fixed, contact a service center.



To move the product, turn the power off and unplug the power cord, the antenna cable and any other wires connected to the product.

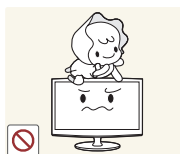
- Otherwise, it may result in electric shock or fire due to the damaged power cord.

Getting Started



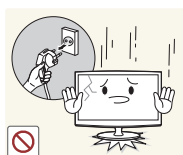
If the product generates a strange noise, a burning smell, or smoke, unplug the power plug immediately and contact a service center.

- Otherwise, it may result in electric shock or fire.



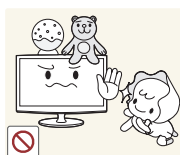
Avoid letting children hang or climb onto the product.

- Otherwise, it may result in the product falling and this may result in injury or death.



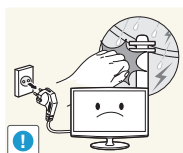
If you drop the product or the case is damaged, turn the power off and unplug the power cord. Contact a service center.

- Otherwise, it may result in fire or electric shock.



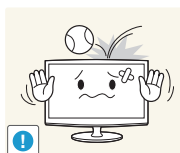
Avoid placing objects such as toys and cookies on top of the product.

- If a child hangs over the product to grab an object, the object or the product may fall and this may result in injury or even death.



When thunder or lightning occurs, unplug the power cord and under no circumstance touch the antenna cable as this is dangerous.

- Otherwise, it may result in electric shock or fire.



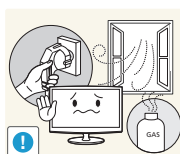
Avoid dropping an object over the product or cause impact to the product.

- Otherwise, it may result in electric shock or fire.



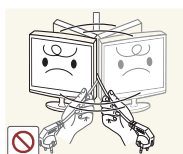
Avoid moving the product by pulling the power cord or antenna cable.

- Otherwise, it may result in electric shock, fire or a problem with the product due to damage to the cable.



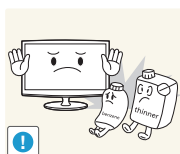
When a gas leak occurs, do not touch the product or the power plug and ventilate immediately.

- A spark may result in an explosion or fire.
- During a thunder or lightning storm, do not touch the power cord or antenna cable.



Avoid lifting up or moving the product by holding only the power cord or signal cable.

- Otherwise, it may result in electric shock, fire or a problem with the product due to damage to the cable.



Avoid using or placing inflammable spray or objects near the product.

- This may result in an explosion or fire.



Take care not to block the vent by a table cloth or curtain.

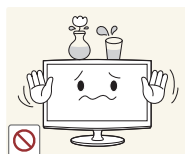
- Otherwise, it may result in fire due to internal overheating.



Avoid inserting metal objects such as a chopsticks, coins or hairpins, or inflammable objects into the product (the vents, ports, etc).

- If water or substances enters the product, turn the power off, unplug the power cord and contact a service center.
- Otherwise, it may result in a problem with the product, electric shock or fire.

Getting Started



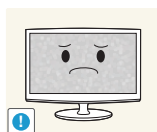
Avoid placing a liquid container such as a vase, flowerpot, beverage, cosmetics or drugs, or a metal object over the product.

- If water or substances enter the product, turn the power off, unplug the power cord and contact a service center.
- Otherwise, it may result in a problem with the product, electric shock or fire.



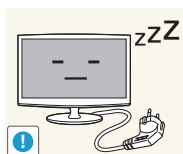
Do not press down hard on the product. The product may become deformed or damaged.

Caution



Displaying a still image for a long time may create a persistent image or stain on the screen.

- If you do not use the product for a long time, use the power-saving mode or set the screensaver to the moving picture mode.



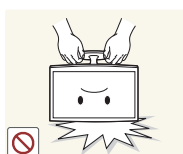
When not using the product for a long time such as leaving your home, unplug the power cord from the wall outlet.

- Otherwise, it may cause dust accumulation and result in fire caused by overheating or short circuit or result in an electric shock.



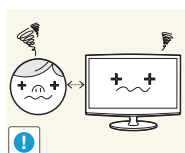
Set the appropriate resolution and frequency for the product.

- Otherwise, it may result in eye strain.



Avoid turning the product upside down or move the product holding only the stand.

- This may cause the product to fall, resulting in damage to the product or injury.



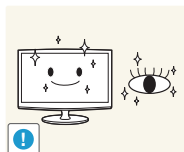
Watching the product from too close a distance continuously may damage your eyesight.



Avoid using a humidifier or cooker near the product.

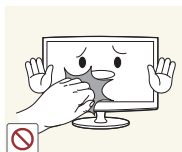
- Otherwise, it may result in electric shock or fire.

Getting Started

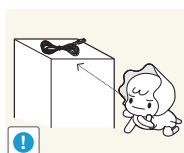


It is important to give your eyes some rest (5 minutes every hour) when viewing the product screen for long periods of time.

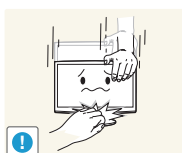
- This will alleviate any eye strain.



Since the display panel is hot after using it for a long time, do not touch the product.

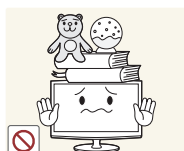


Keep the small accessories in a location out of the reach of children.



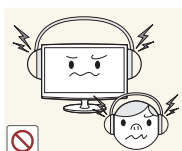
Take care when adjusting the angle of the product or the height of the stand.

- If your hand or finger is caught, you may be injured.
- If the product is tilted excessively, the product may fall and this may result in injury.



Avoid placing a heavy object over the product.

- Otherwise, it may result in a problem with the product or injury.



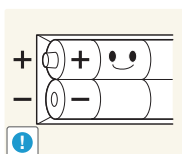
When using headphones or earphones, do not turn the volume too high.

- Having the sound too loud may damage your hearing.



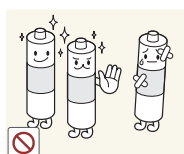
Be careful that children do not place the batteries in their mouths when removed from the remote control. Place the battery in a location that children or infants cannot reach.

- If children have had the battery in their mouths, consult your doctor immediately.



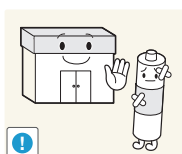
When replacing the batteries, insert them with right polarity (+, -).

- Otherwise, the battery may become damaged or it may cause fire, personal injury or damage due to leakage of the internal liquid.



Use only specified standard batteries. Do not use new and used batteries together.

- This may cause a battery to break or leak and may cause fire, injury, or contamination (damage).



The batteries (and rechargeable batteries) are not ordinary refuse and must be returned for recycling purposes. The customer is responsible for returning the used or rechargeable batteries for recycling.

- The customer can return used or rechargeable batteries to a nearby public recycling center or to a store selling the same type of the battery or rechargeable battery.

Getting Started

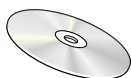
List of Features

- **Excellent Digital Interface & Networking:** With a built-in HD digital tuner, nonsubscription HD broadcasts can be viewed without a cable box / STB (Set-Top-Box) satellite receiver (Set-Top Box).
- **My Contents:** Allows you to play music files, pictures and movies saved on a USB device (p. 33).
- **Self Diagnosis:** You can check whether picture or sound operate normally (p. 32).

Accessories

- Please make sure the following items are included with your TV. If any items are missing, contact your dealer.
- The items' colors and shapes may vary depending on the models.
- Cables not included in the package contents can be purchased separately.
- Check that there is no accessory hidden behind packing materials when you open the box.

- Remote Control & Batteries (AAA x 2) (Not available in some locations)
- Cleaning Cloth
- Warranty Card / Safety Guide (Not available in some locations)
- Power cord



• User Manual



• Quick Setup Guide



• D-sub Cable



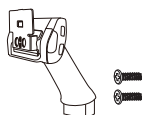
• Stereo Cable



• AV/Component Adapter



• Cable Holder

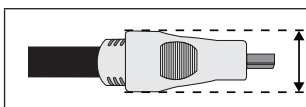


• Stand Connector / Screws (2ea)



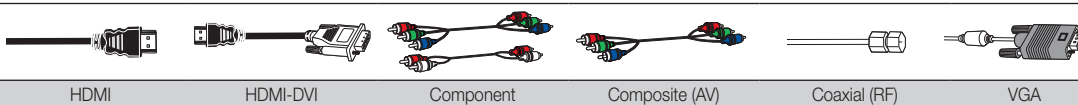
• Stand Base

- For best cable connection to this product, be sure to use cables with a maximum thickness as below:



- Maximum thickness - 0.55 inches (14mm)

Input Cables (Sold Separately)



HDMI

HDMI-DVI

Component

Composite (AV)

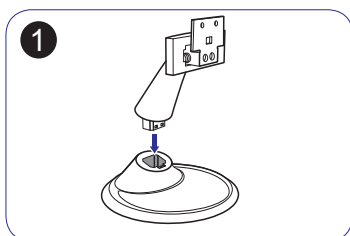
Coaxial (RF)

VGA

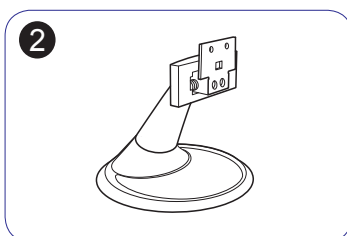
Getting Started

Installing the Stand

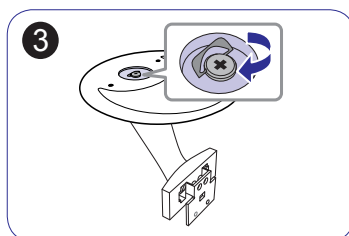
 Before assembling the product, place the product down on a flat and stable surface so that the screen is facing downwards.



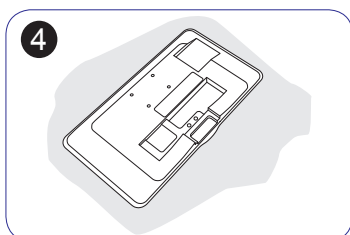
Insert the Stand Connector into the Stand in the direction shown by the figure.



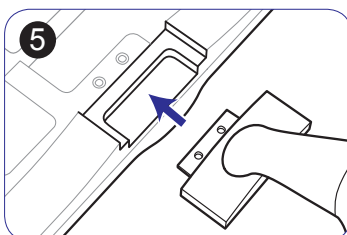
Check if the Stand Connector is firmly connected.



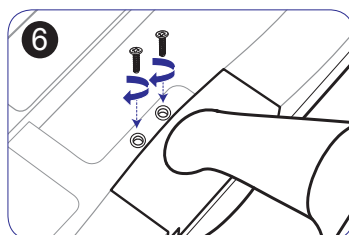
Turn the connecting screw at the bottom of the stand fully so that it is completely fixed.



Place a soft cloth over the table to protect the product and place the product onto the cloth so that the front of the product is facing downwards.

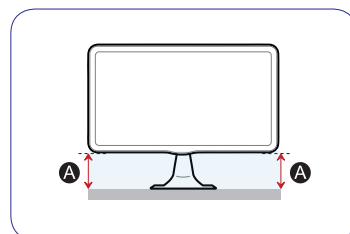


Push the assembled stand into the main body in the direction of the arrow as shown in the figure.

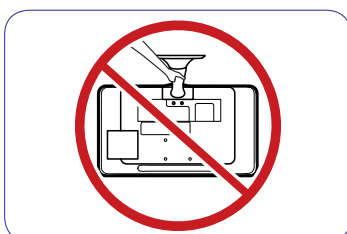


Firmly fasten the stand using the screws.

- Caution



If the height of "A" on one side is different from the other side, unfasten the screws, adjust the heights, and re-assemble.



Avoid lifting the product holding only the stand.

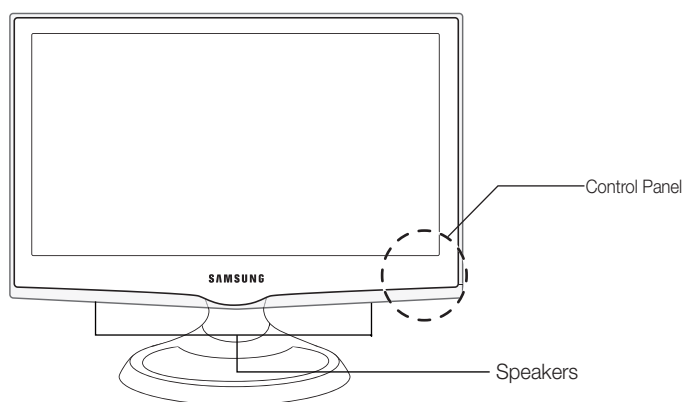
 The cleaning cloth is supplied with black high-glossy models only.

 The colour and the appearance may differ depending on the product, and the specifications are subject to change without prior notice to improve the performance.

Getting Started

Viewing the Control Panel

-  The product color and shape may vary depending on the model.
-  Contact with objects other than your finger may switch on the LED touchpad.



Remote control sensor	Aim the remote control towards this spot on the TV.
Power Indicator	Blinks and turns off when the power is on and lights up in standby mode.
SOURCE 	Toggles between all the available input sources. In the on-screen menu, use this button as you would use the ENTER  button on the remote control.
MENU	Displays an on-screen menu, the OSD (on screen display) of your TV's features.
—VOL+	Adjusts the volume. In the OSD, use the —VOL+ buttons as you would use the ◀ and ▶ buttons on the remote control.
▼ CH ▲	Changes the channels. In the OSD, use the ▼ CH ▲ buttons as you would use the ▼ and ▲ buttons on the remote control.
⏻ (Power)	Turns the TV on or off.

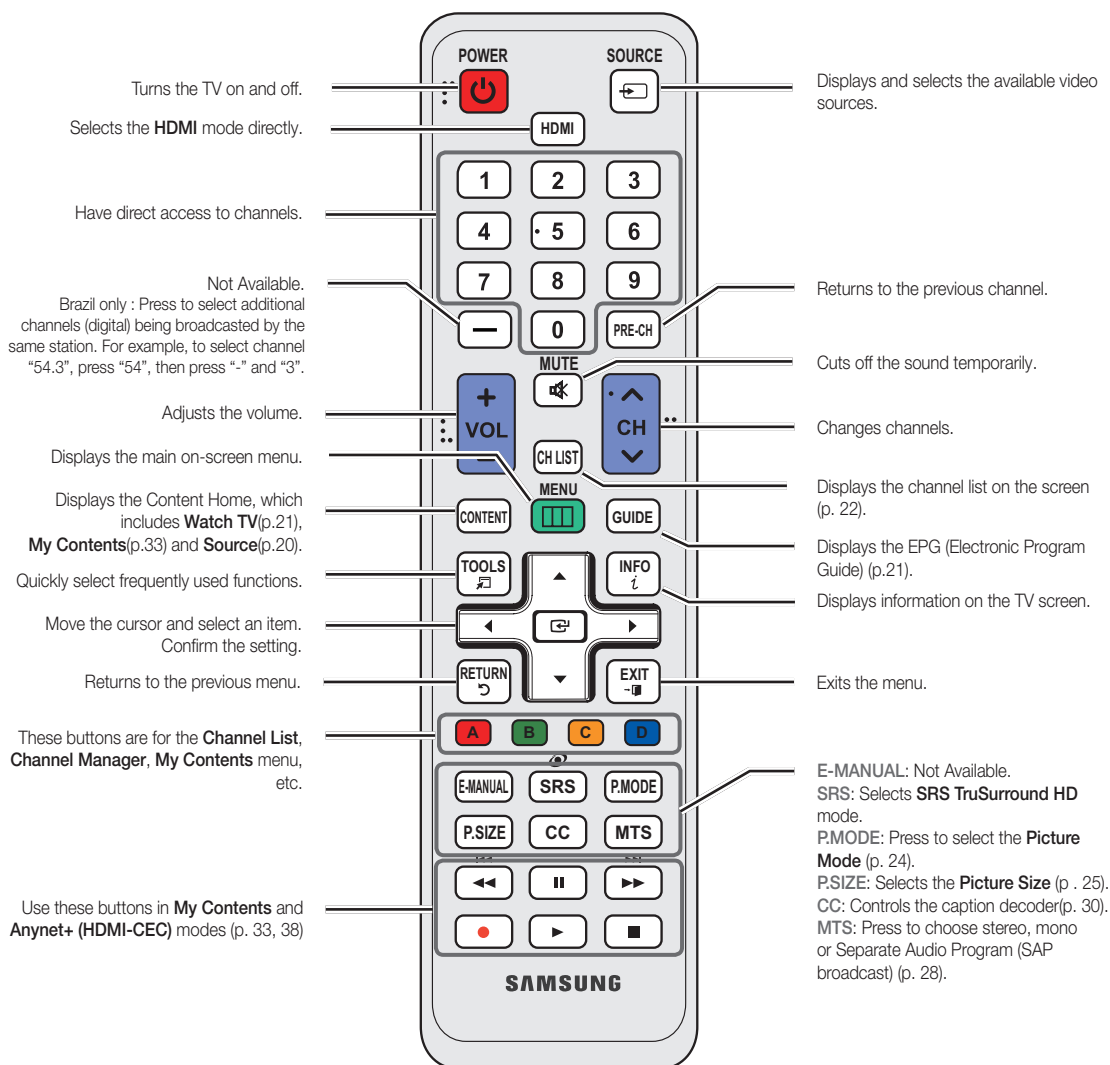
Standby mode

Do not leave your TV in standby mode for long periods of time (when you are away on a holiday, for example). A small amount of electric power is still consumed even when the power button is turned off. It is best to unplug the power cord.

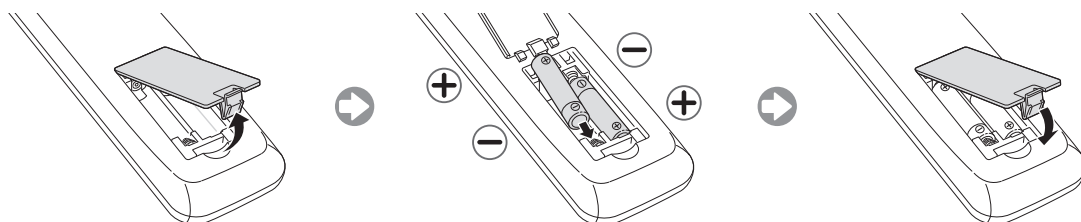
Getting Started

Viewing the Remote Control

 This is a special remote control for the visually impaired persons and has Braille points on the Power, Channel and Volume buttons.



Installing batteries (Battery size: AAA)

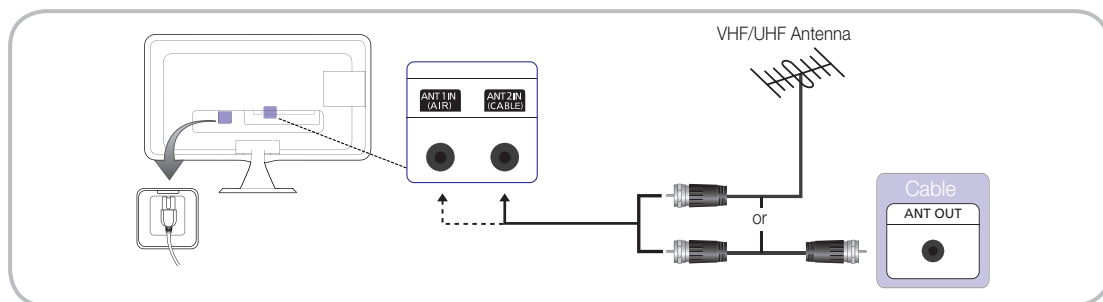


Connections

Connecting to an Antenna

When the TV is initially powered on, basic settings proceed automatically.

 Connecting the power cord and antenna.



Plug & Play (Initial Setup)

When the TV is initially powered on, a sequence of on-screen prompts will assist in configuring basic settings. Press the **POWER**  button. **Plug & Play** is available only when the Input **Source** is set to **TV**.

 To return to the previous step, press the Red button.

1	Selecting a language	Press the ▲ or ▼ button, then press the ENTER  button. Select the desired OSD (On Screen Display) language.	
2	Selecting Store Demo or Home Use	Press the ◀ or ▶ button, then press the ENTER  button. - Select the Home Use mode. Store Demo mode is for retail environments. - To return the unit's settings from Store Demo to Home Use (standard): Press the volume button on the TV. When you see the volume OSD, press and hold MENU for 5 sec. Store Demo is only for shop display. If you select it, several functions are not able to use. Please select Home Use when you watch at home.	
3	Setting the Clock Mode	Set the Clock Mode automatically or manually. Auto: Allows you to select time zone. Manual: Allows you to manually set the current date and time (p. 28).	
4	Selecting an antenna	Press the ▲ or ▼ button, then press the ENTER  button. - If the antenna is connected to ANT 1 IN (AIR), select Air and if it is connected to ANT 2 IN (CABLE), select Cable. - If both ANT 1 IN (AIR) and ANT 2 IN (CABLE) are connected, select Air+Cable.	
5	Selecting a channel	After selecting the antenna source to memorize, select Search . The TV will begin memorizing all of the available channels. For more information, refer to Channel → Auto Program (p. 24). Press the ENTER  button at any time to interrupt the memorization process.	
6	Enjoy your TV.	Press the ENTER  button.	

If You Want to Reset This Feature...

 **MENU**  → **System** → **Plug & Play** → **ENTER** 

You should do **Plug & Play** again at home although you did in shop.

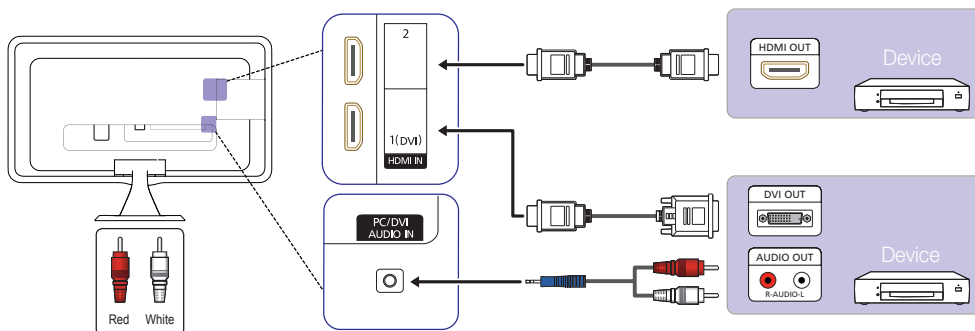
 If you forget the PIN code, press the remote control buttons in the following sequence in Standby mode, which resets the PIN to "0-0-0-0": **POWER** (off) → **MUTE** → **8** → **2** → **4** → **POWER** (on).

Connections

Connecting to an AV Device

Using an HDMI or an HDMI to DVI Cable: HD connection (up to 1080p)

Available devices: DVD, Blu-ray player, HD cable box, HD STB (Set-Top-Box) satellite receiver



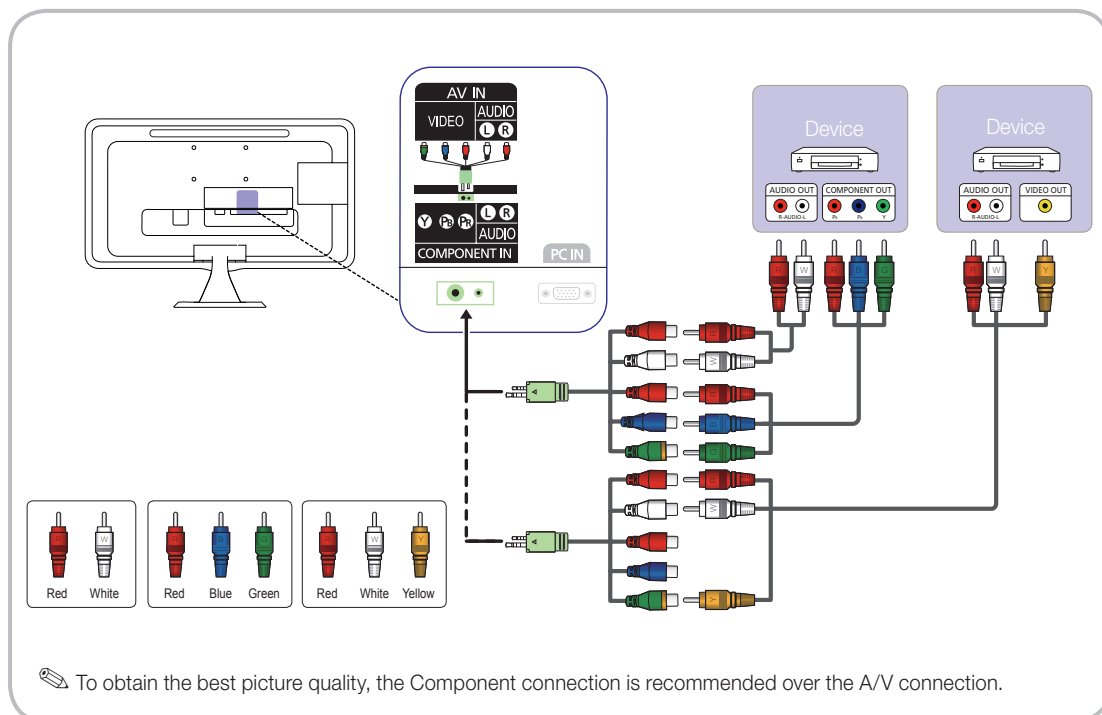
HDMI IN 1(DVI), 2 / PC/DVI AUDIO IN

- For better picture and audio quality, connect to a digital device using an HDMI cable.
- An HDMI cable supports digital video and audio signals, and does not require an audio cable.
 - To connect the TV to a digital device that does not support HDMI output, use an HDMI/DVI and audio cables.
- The picture may not display normally (if at all) or the audio may not work if an external device that uses an older version of HDMI mode is connected to the TV. If such a problem occurs, ask the manufacturer of the external device about the HDMI version and, if out of date, request an upgrade.
- Be sure to purchase a certified HDMI cable. Otherwise, the picture may not display or a connection error may occur.
- A basic high-speed HDMI cable or one with ethernet is recommended. This product does not support the ethernet function via HDMI.

Connections

Using a Component (up to 1080p) or Audio/Video (480i only) Cable

Available devices: DVD, Blu-ray player, cable box, STB satellite receiver, VCR

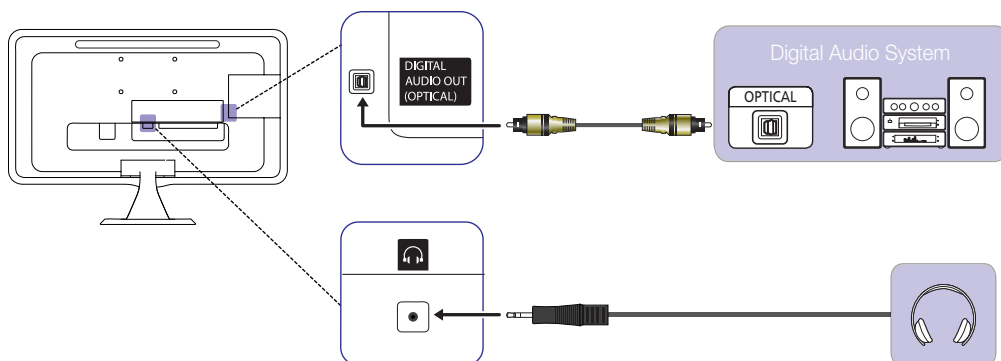


Connections

Connecting to an Audio Device

Using an Optical (Digital) or an Audio (Analog) Cable Connection

Available devices: Digital Audio System, Amplifier, DVD home theater



DIGITAL AUDIO OUT (OPTICAL)

- When a Digital Audio System is connected to the **DIGITAL AUDIO OUT (OPTICAL)** jack, decrease the volume of both the TV and the system.
- 5.1 CH (channel) audio is available when the TV is connected to an external device supporting 5.1 CH.
- When the receiver (home theater) is set to on, you can hear sound output from the TV's optical jack. When the TV is receiving a DTV signal, the TV will send 5.1 CH sound to the home theater receiver. When the source is a digital component such as a DVD / Blu-ray player / cable box / STB (Set-Top-Box) satellite receiver and is connected to the TV via HDMI, only 2 CH audio will be heard from the home theater receiver. If you want to hear 5.1 CH audio, connect the digital audio out jack from your DVD / Blu-ray player / cable box / STB satellite receiver directly to an amplifier or home theater.

 **Headphones** : You can connect your headphones to the headphones output on your set. While the headphones are connected, the sound from the built-in speakers will be disabled.

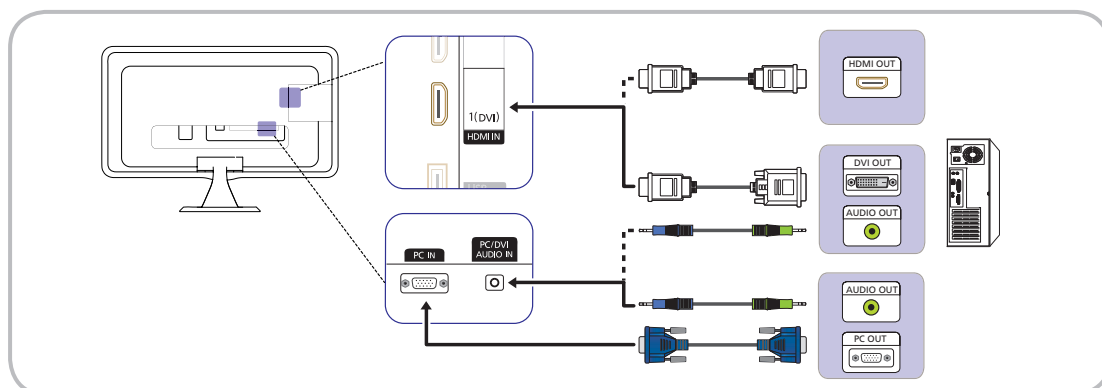
- Sound function may be restricted when connecting headphones to the TV.
- Headphone volume and TV volume are adjusted separately.

Connections

Connecting to a PC

Using an HDMI cable or an HDMI to DVI cable or a D-sub cable

Connecting through the HDMI cable may not be supported depending on the PC.



Display Modes (D-Sub and HDMI/DVI Input)

Optimal resolution is 1920 X 1080 @ 60 Hz.

Display Mode			Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (H/V)
Mode	Resolution					
IBM	640 x 350	70 Hz	31.469	70.086	25.175	+/-
IBM	720 x 400	70 Hz	31.469	70.087	28.322	-/+
MAC	640 x 480	67 Hz	35.000	66.667	30.240	-/-
MAC	832 x 624	75 Hz	49.726	74.551	57.284	-/-
MAC	1152 x 870	75 Hz	68.681	75.062	100.000	-/-
VESA DMT	640 x 480	60 Hz	31.469	59.940	25.175	-/-
VESA DMT	640 x 480	72 Hz	37.861	72.809	31.500	-/-
VESA DMT	640 x 480	75 Hz	37.500	75.000	31.500	-/-
VESA DMT	800 x 600	56 Hz	35.156	56.250	36.000	+/+
VESA DMT	800 x 600	60 Hz	37.879	60.317	40.000	+/+
VESA DMT	800 x 600	72 Hz	48.077	72.188	50.000	+/+
VESA DMT	800 x 600	75 Hz	46.875	75.000	49.500	+/+
VESA DMT	1024 x 768	60 Hz	48.363	60.004	65.000	-/-
VESA DMT	1024 x 768	70 Hz	56.476	70.069	75.000	-/-
VESA DMT	1024 x 768	75 Hz	60.023	75.029	78.750	+/+
VESA DMT	1152 x 864	75 Hz	67.500	75.000	108.000	+/+
VESA DMT	1280 x 800	60 Hz	49.702	59.810	83.500	-/+
VESA DMT	1280 x 960	60 Hz	60.000	60.000	108.000	+/+
VESA DMT	1280 x 1024	60 Hz	63.981	60.020	108.000	+/+
VESA DMT	1280 x 1024	75 Hz	79.976	75.025	135.000	+/+
VESA DMT	1360 x 768	60 Hz	47.712	60.015	85.500	+/+
VESA DMT	1440 x 900	60 Hz	55.935	59.887	106.500	-/+
VESA DMT	1440 x 900	75 Hz	70.635	74.984	136.750	-/+
VESA DMT	1680 x 1050	60 Hz	65.290	59.954	146.250	-/+
VESA DMT	1920 x 1080	60 Hz	67.500	60.000	148.500	+/+

NOTE

- For PC connection, you must use the **HDMI IN 1(DVI)** jack.
- The interlace mode is not supported.
- The set may operate abnormally if a non-standard video format is selected.
- Separate and Composite modes are supported. SOG(Sync On Green) is not supported.

Connections

Changing the Input Source

Source



SOURCE → Source

Use to select TV or an external input sources such as a DVD / Blu-ray player / cable box / STB satellite receiver.

SOURCE



- TV / PC / HDMI1/DVI / HDMI2 / AV / Component / USB

You can only choose external devices that are connected to the TV. In the **Source**, connected inputs will be highlighted.

In the **Source**, PC is always activated.

Edit Name



SOURCE → TOOLS → Edit Name → ENTER

- VCR / DVD / Cable STB / Satellite STB / PVR STB / AV Receiver / Game / Camcorder / PC / DVI PC / DVI Devices / TV / IPTV / Blu-ray / HD DVD / DMA: Name the device connected to the input jacks to make your input source selection easier.

When connecting a PC to the **HDMI IN 1(DVI)** port with HDMI cable, you should set the TV to **PC** mode under **Edit Name**.

When connecting a PC to the **HDMI IN 1(DVI)** port with HDMI to DVI cable, you should set the TV to **DVI PC** mode under **Edit Name**.

When connecting an AV devices to the **HDMI IN 1(DVI)** port with HDMI to DVI cable, you should set the TV to **DVI Devices** mode under **Edit Name**.

Information



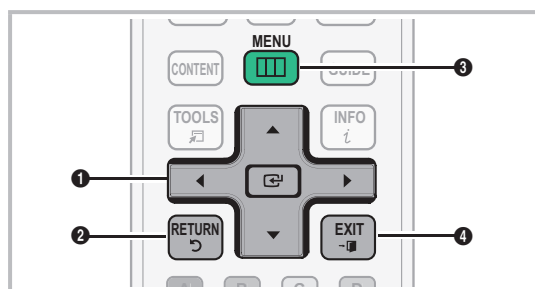
SOURCE → TOOLS → Information → ENTER

You can see detailed information about the selected external device.

Basic Features

How to Navigate Menus

Before using the TV, follow the steps below to learn how to navigate the menu and select and adjust different functions.



- 1 ENTER / Direction button: Move the cursor and select an item. Confirm the setting.
- 2 RETURN button: Returns to the previous menu.
- 3 MENU button: Displays the main on-screen menu.
- 4 EXIT button: Exits the on-screen menu.

How to Operate the OSD (On Screen Display)

The access step may differ depending on the selected menu.

1	MENU	The main menu options appear on the screen: Picture, Sound, Channel, System, Support.
2	▲ / ▼	Select an icon with the ▲ or ▼ button.
3	ENTER	Press ENTER to access the sub-menu.
4	▲ / ▼	Select the desired submenu with the ▲ or ▼ button.
5	◀ / ▶	Adjust the value of an item with the ▶ or ▶ button. The adjustment in the OSD may differ depending on the selected menu.
6	ENTER	Press ENTER to confirm the selection.
7	EXIT	Press EXIT.

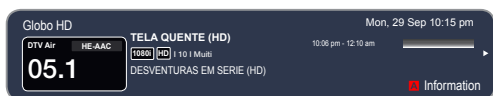
Basic Features

Using the INFO button (Now & Next guide)

The display identifies the current channel and the status of certain audio-video settings. The Now & Next guide shows daily TV program information for each channel according to the broadcasting time.



- Scroll ◀ / ▶ to view information for a desired program while watching the current channel.



Using the Channel Menu

Press the CONTENT button to select **Watch TV**, and then select the menu you want to use. Each screen will be displayed.



- The displayed image may differ depending on the model.

Guide

CONTENT → **Watch TV** → **Guide** → **ENTER**

The EPG (Electronic Program Guide) information is provided by broadcasters. Using program schedules provided by broadcasters, you can specify programs you want to watch in advance so that the channel automatically changes to the selected program channel at the specified time. Program entries may appear blank or out of date depending on a channel status.



Using Channel View



- The displayed image may differ depending on the model.

Using the operation buttons with the **Guide**.

- **A** Red (**Sche. Mgr**): Displays the **Schedule Manager**.
- **B** Green (**-2 Hours**): Viewing the list of program to be broadcasted before 2 hours.
- **C** Yellow (**+2 Hours**): Viewing the list of program to be broadcasted after 2 hours.
- **D** Blue (**Exit**): Exits the guide.
- **Information**: Displays details of the selected program.
- (**Page**): Move to next or previous page.
- (**Watch / Schedule**)
 - When selecting the current programme, you can watch the selected programme.
 - When selecting the future programme, you can reserve to watch the selected programme. To cancel the schedule, press the **ENTER** button again and select **Cancel Schedules**.

Schedule Manager

CONTENT → **Watch TV** → **Schedule Manager** → **ENTER**

You can view, modify or delete a Channel you have reserved to watch.

Using the Timer Viewing

You can set a desired channel to be displayed automatically at the intended time.

You must set the current time first using the **Time** → **Clock** function in the **System** menu to use this function.

1. Press the **ENTER** button to select **Schedule Manager**.
2. Press **ENTER** key to add manual booking. The **Timer Viewing** screen appears.

Basic Features

- Press the ◀ / ▶ / ▲ / ▼ buttons to set **Antenna**, **Channel**, **Repeat**, **Date**, and **Start Time**.
 - Antenna**: Select the desired broadcasting signal.
 - Channel**: Select the desired channel.
 - Repeat**: Select **Once**, **Manual**, **Sat~Sun**, **Mon~Fri** or **Everyday** to set at your convenience. If you select **Manual**, you can set the day you want.
 - The ✓ mark indicates the date is selected.
 - Date**: you can set desired date.
 - Start Time**: You can set start time you want.
 - On the **Information** screen, you can change or cancel a reserved information.
 - Cancel Schedules**: Cancel a show you have reserved to watch.
 - Edit**: Change a show you have reserved to watch.
 - Return**: Return to the previous screen.

Channel List

 **CONTENT** → **Watch TV** → **Channel List** → **ENTER** 

You can view channel information, **Added Channels** or **Favorite 1 - 5**.



- The displayed image may differ depending on the model.

 When you press the **CH LIST** button on the remote control, **Channel List** screen will be displayed at once.

- Added Channels**: Shows all currently available channels.
- Favorites 1 - 5**: Shows all favorite channels.
 - The TV displays **Favorites** only if you have added favorites using **Add to Favorites**.
 - If you want to view the list of favorite channels quickly, press the **CH LIST** button, and then press the ▶ (**CH Mode**) button to display **Favorites 1 - 5**. Press the ◀ button to return to the **Channel List**.

Using the colored and function buttons with the Channel List.

-  **Red (Antenna)**: Switches to **Air** or **Cable**.
-  **Yellow (Program View / Channel View)**: For digital channels, switches the display between **Program View** and **Channel View**. When you select a digital channel in **Channel View**, press once to display a list of programs on that channel. Press again to re-display the **Channel List**.
-  (**CH Mode / Channel**): Toggles between the Favorites list (if you have added favorites using **Add to Favorites**) and the **Channel List**.
-  (**Watch**): Watches the channel you select.
-  (**Page**): Move to next or previous page.

How to use Timer Viewing in Channel List (digital channels only)

When you set the **Timer Viewing** in **Channel List**, you can only set the program in **Program View**.

- Press the **CH LIST** button, then select a desired digital channel.
- Press the  (**Program View**) button.
- Press the ▲ / ▼ buttons to select the desired program, and then press the  (**Information**) button.
- Select **Timer Viewing**, and then press the **ENTER**  button when done.

 If you want to cancel **Timer Viewing**, follow steps 1 through 3. Select **Cancel Schedules**.

Basic Features

Using the Channel

Channel Manager



CONTENT → Watch TV → Channel Manager → ENTER

Using **Channel Manager**, you can add, edit, or delete Added and Favorite channels. You can also add and edit the channel names - for analog channels.

- **Added Ch.:** Shows all added channels.
- **All Channels:** Shows all currently available channels. Includes channels that have not been added.
- **Favorites 1 - 5:** Shows five favorite channels.

Using the colored buttons with the **Channel Manager**.

- **Red (Antenna):** Switches to **Air** or **Cable**.
- **Blue (Sorting):** Change the list ordered by channel name, channel number.

Channel Status Display Icons

Icon	Operations
	An analog channel.
	A channel selected.
	A channel set as a Favorite.
	A locked channel.

Channel Manager Option Menu

Set each channel using the **Channel Manager** menu options (**Watch**, **Add to Favorites / Edit Favorites**, **Lock / Unlock**, **Channel Name Edit**, **Delete / Add**, **Deselect All / Select All**). Option menu items may differ depending on the channel status.

1. Use the arrow buttons to select a channel, and then press the **ENTER** button.
 - You can select more than one channel by highlighting each channel with the cursor, and then pressing **ENTER**.
2. Select a function, and then press **ENTER** to activate the function or change its settings.
 - **Watch:** Watch the selected channel.
 - **Add to Favorites / Edit Favorites (TOOLS):** Set channels you watch frequently as favorite.
 1. Select the **Add to Favorites / Edit Favorites**, then press the **ENTER** button. The **Favorites 1 - 5** screen appears.
 - If the channel is already added to favourite channel, **Edit Favorites** will be shown.

2. The **Favorites 1 - 5** screen has five slots. You can add a favorite channel to any one of the slots. Select a slot using the up and down arrows on your remote.

One favorite channel can be added in several of favorites among **Favorites 1 - 5**.

3. Select the **OK** button, and then press **ENTER**.

- **Lock / Unlock (TOOLS):** Lock a channel so that the channel cannot be selected and viewed.

This function is available only when the **Channel Lock** is set to **On**.

The PIN input screen appears. Enter your 4-digit PIN, the default of which is "0-0-0-0". Change the PIN using the **Change PIN** option.

- **Channel Name Edit** (analog channels only): Assign your own channel name.
- **Delete / Add:** Delete or add a channel to display the channels you want.

NOTE

- All deleted channels will be shown on the **All Channels** menu.
- A gray-colored channel indicates the channel has been deleted.
- Add only appears if you have selected a deleted channel on the **All Channels** list.
- Delete only appears if you have selected an **Added channel** on the **Added Ch.** or **All Channels** list.
- **Deselect All / Select All:** Select all the channels or deselect all the selected channels in the channel manager.

Basic Features

Channel Menu

Memorizing Channels

 MENU  → Channel → ENTER 

Antenna (Air / Cable)

Before your television can begin memorizing the available channels, you must specify the type of signal source that is connected to the TV.

 If the antenna is connected to **ANT 1 IN (AIR)**, select **Air** and if it is connected to **ANT 2 IN (CABLE)**, select **Cable**.

Auto Program

- **Air:** Air antenna signal.
- **Cable:** Cable antenna signal.
- **Air+Cable:** Air and Cable antenna.

Fine Tune

(analog channels only)

If the reception is clear, you do not have to fine tune the channel, as this is done automatically during the search and store operation. If the signal is weak or distorted, fine tune the channel manually. Scroll to the left or right until the image is clear.

-  Settings are applied to the channel you're currently watching.
-  Fine tuned channels that have been saved are marked with an asterisk "*" on the right-hand side of the channel number in the channel banner.
-  To reset the fine-tuning, select **Reset**.

Color System (Auto / PAL-M / PAL-N / NTSC)

Normally the TV can receive image and sound with good quality when in the mode auto. This mode detects the signal color system automatically. In case of some signal reception with color unsatisfactory, select the **Color System** mode to **Auto**, **PAL-M**, **PAL-N** or **NTSC**.

Picture Menu

Changing the Preset Picture Mode

 MENU  → Picture → Picture Mode → ENTER 

Picture Mode

Select your preferred picture type.

 In **PC** mode, you can only select **Entertain** and **Standard**.

- **Dynamic:** Suitable for a bright room.
- **Standard:** Suitable for a normal environment.
- **Movie:** Suitable for watching movies in a dark room.
- **Entertain:** Suitable for watching movies and games.

 It is available in **PC** mode.



Adjusting Picture Settings

 MENU  → Picture → ENTER 

Samsung MagicAngle

This feature allows you to see optimal screen quality according to your viewing position. When viewing the screen at an angle from below, above or the side of the product, by setting the appropriate mode for each position you can obtain a similar picture quality as viewing the screen directly from the front.

- **Off:** Select when viewing from the front position.
- **Lean back mode:** Select when viewing from a slightly lower position.
- **Standing Mode:** Select when viewing from the upper position.

 When **Samsung MagicAngle** is set to **Lean back mode** or **Standing Mode**, **Gamma** is not available.

Basic Features

Backlight / Contrast / Brightness / Sharpness / Color / Tint (G/R)

Your television has several setting options for picture quality control.

NOTE

- When you make changes to **Backlight, Contrast, Brightness, Sharpness, Color or Tint (G/R)** the OSD will be adjusted accordingly.
- In PC mode, you can only make changes to **Backlight, Contrast** and **Brightness**.
- You can adjust and store settings for each external device connected to the TV.
- Lowering picture brightness reduces power consumption.

Screen Adjustment

Screen Adjustment provides various picture size and aspect ratio options. Select an option using the up and down arrow keys, and then press **ENTER** . Use the arrow keys to select an option in the sub-menu, and then press **ENTER** .

- **Picture Size:** Your cable box / satellite receiver may have its own set of screen sizes as well. However, we highly recommend you use **16:9** mode most of the time.



16:9: Sets the picture to 16:9 wide mode.

Zoom1: Use for moderate magnification.

Zoom2: Use for a stronger magnification.

Wide Fit: Enlarges the aspect ratio of the picture to fit the entire screen.

 Available with HD 1080i / 720p signals in 16:9 mode.

4:3: Sets the picture to basic (4:3) mode.

 Do not watch in 4:3 format for a long time. Traces of borders displayed on the left, right and center of the screen may cause image retention (screen burn) which are not covered by the warranty.

Screen Fit: Displays the full image without any cut-off when HDMI (720p / 1080i / 1080p) or Component (1080i / 1080p) signals are inputted.

- **Position:** Adjusts the picture position. **Position** is only available if **Picture size** is set to **Zoom1, Zoom2, Wide Fit, or Screen fit**.

 To use the **Position** function after selecting **Zoom1, Zoom2 or Wide Fit**, follow these steps:

1. Press the **▼** button to select **Position**.
2. Press the **ENTER**  button.
3. Press the **▲** or **▼** button to move the picture up or down.

4. When done, Press the **ENTER**  button.

 If you want to reset the pictures to its original position, select **Reset** in the **Position** screen, and then press **ENTER** . The picture will be reset to its default position.

 To use the **Position** function after selecting **Screen Fit** when connected to an HDMI (1080i/1080p) or Component (1080i/1080p) source, follow these steps:

1. Press the **▼** button to select **Position**.
2. Press the **ENTER**  button.
3. Press the **▲**, **▼**, **◀** or **▶** button to move the picture.
4. When done, Press the **ENTER**  button.

NOTE

- If you want to reset the pictures to its original position, select **Reset** in the **Position** screen. The picture will be set to its default position.
- HD (High Definition): 16:9 - 1080i / 1080p (1920x1080), 720p (1280x720)
- You can adjust and store settings for each external device you have connected to an input on the TV.
- Picture Sizes available by Input Source:

Input Source	Picture Size
ATV, AV, Component (480i, 480p)	16:9, Zoom1, Zoom2, 4:3
DTV(1080i), Component (1080i, 1080p), HDMI (720p, 1080i, 1080p)	16:9, Wide Fit, 4:3, Screen Fit
PC	16:9, 4:3

■ PC Screen Adjustment

 Available only **PC** mode.

Coarse / Fine: Removes or reduces picture noise. If the noise is not removed by Fine-tuning alone, then adjust the frequency as best as possible (**Coarse**) and Fine-tune again. After the noise has been reduced, readjust the picture so that it is aligned to the center of screen.

Position: Adjusts the PC screen position with direction button (**▲** / **▼** / **◀** / **▶**).

Image Reset: Resets the image to default settings.

Setting up the TV with Your PC

Set the input source to PC.

 **MENU**  → **Picture** → **ENTER** 

Auto Adjustment

Adjust frequency values/positions and fine tune the settings automatically.

 Not available when connecting with an HDMI/DVI cable.

Basic Features

Using Your TV as a Computer (PC) Display

Setting Up Your PC Software (Based on Windows XP)

Depending on the version of Windows and the video card, the actual screens on your PC will probably look different, but the same basic set-up information will apply in most cases. (If not, contact your computer manufacturer or Samsung Dealer.)

1. Click on "Control Panel" on the Windows start menu.
2. Click on "Appearance and Themes" in the "Control Panel" window and a display dialog-box will appear.
3. Click on "Display" and a display dialog box will appear.
4. Navigate to the "Settings" tab on the display dialog-box.
 - The correct size setting (resolution).
[Optimum: 1920 X 1080 pixels]
 - If a vertical-frequency option exists on your display settings dialog box, the correct value is "60" or "60 Hz". Otherwise, just click "OK" and exit the dialog box.

Maintaining the Correct Posture when Using this Product



Maintain the correct posture when using this product.

- Straighten your back.
- Keep a distance of 45~50 cm (15~19 inches) from your eyes to the screen. Look down at the screen and face the screen forwards.
- Adjust the angle of the product so that light is not reflected onto the screen.
- Keep your elbow at a right angle and keep your arm level with the back of your hand.
- Keep your elbow at a right angle.
- Place your heels flat on the ground while keeping your knees at an angle of 90 degrees or higher and maintain the position of your arm so that your arm is below your heart.

Changing the Picture Options

Advanced Settings

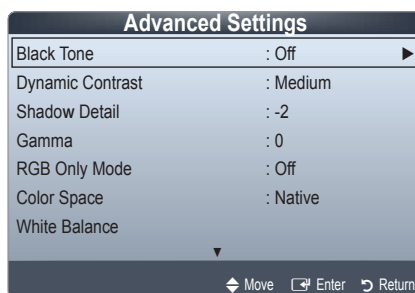


MENU → Picture → Advanced Settings → ENTER

(Advanced Settings are available in **Standard /Movie** mode)

Compared to previous models, new Samsung TVs have a more precise picture.

In PC mode, you can only make changes to **Gamma** and **White Balance**.



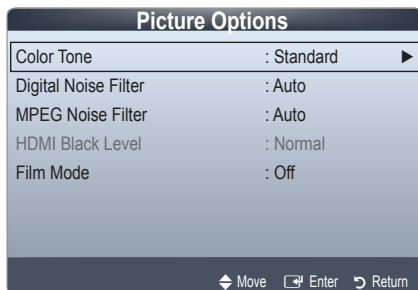
- **Black Tone (Off / Dark / Darker / Darkest):** Select the black level to adjust the screen depth.
- **Dynamic Contrast (Off / Low / Medium / High):** Adjust the screen contrast.
- **Shadow Detail (-2~+2):** Increase the brightness of dark images.
- **Gamma:** Adjust the primary color intensity.
- **RGB Only Mode (Off / Red / Green / Blue):** Displays the **Red**, **Green** and **Blue** color for making fine adjustments to the hue and saturation.
- **Color Space (Auto / Native):** Adjust the range of colors available to create the image.
- **White Balance:** Adjust the color temperature for a more natural picture.
 - R-Offset / G-Offset / B-Offset:** Adjust each color's (red, green, blue) darkness.
 - R-Gain / G-Gain / B-Gain:** Adjust each color's (red, green, blue) brightness.
 - Reset:** Resets the **White Balance** to it's default settings.
- **Flesh Tone:** Emphasize pink "Flesh Tone."
- **Edge Enhancement (Off / On):** Emphasize object boundaries.
- **Motion Lighting (Off / On):** Reduce power consumption by brightness control.
 - When changing a setting value of **Contrast**, **Motion Lightnignting** will be set to **Off**.

Basic Features

Picture Options

 MENU  → Picture → Picture Options → ENTER 

 In PC mode, you can only make changes to the **Color Tone**.



■ Color Tone (Cool / Standard / Warm1 / Warm2)

 **Warm1** or **Warm2** will be deactivated when the picture mode is **Dynamic**.

 Settings can be adjusted and stored for each external device connected to an input on the TV.

■ Digital Noise Filter (Off / Low / Medium / High / Auto / Auto Visualization):

If the broadcast signal received by your TV is weak, you can activate the **Digital Noise Filter** feature to reduce any static and ghosting that may appear on the screen.

 When the signal is weak, try other options until the TV displays.

Auto Visualization: When changing analog channels, displays signal strength.

 Only available for analog channels.

 When bar is green, is that the best possible signal.

■ MPEG Noise Filter (Off / Low / Medium / High / Auto):

Reduces MPEG noise to provide improved picture quality.

■ HDMI Black Level (Normal / Low):

Selects the black level on the screen to adjust the screen depth.

 Available only in **HDMI** mode.

■ Film Mode (Off / Auto1 / Auto2):

Sets the TV to automatically sense and processes film signals from all sources and adjusts the picture for optimum quality.

 Available in TV, AV, COMPONENT (480i / 1080i) and HDMI (480i / 1080i).

Reset Picture (OK / Cancel)

Resets your current picture mode to its default settings.

Sound Menu

Changing the Preset Sound Mode

 MENU  → Sound → Sound Mode → ENTER 

Sound Mode

- **Standard:** Selects the normal sound mode.
- **Music:** Emphasizes music over voices.
- **Movie:** Provides the best sound for movies.
- **Clear Voice:** Emphasizes voices over other sounds.
- **Amplify:** Increase the intensity of high-frequency sound to allow a better listening experience for the hearing impaired.

 If **Speaker Select** is set to **External Speaker**, **Sound Mode** is disabled.

Adjusting Sound Settings

 MENU  → Sound → Sound Effect → ENTER 

Sound Effect

(standard sound mode only)

 If **Speaker Select** is set to **External Speaker**, **Sound Effect** is disabled.

■ SRS TruSurround HD (Off / On)

This function provides a virtual 5.1 channel surround sound experience through a pair of speakers using HRTF(Head Related Transfer Function) technology.



■ SRS TruDialog (Off / On)

This function allows you to increase the intensity of a voice over background music or sound effects so that dialog can be heard more clearly.

■ Equalizer

Adjusts the sound mode.

- **Balance L/R:** Adjusts the balance between the right and left speaker.
- **100Hz / 300Hz / 1kHz / 3kHz / 10kHz** (Bandwidth Adjustment): Adjusts the level of specific bandwidth frequencies.
- **Reset:** Resets the equalizer to its default settings.

Basic Features

Sound Settings

 MENU  → Sound → ENTER 

Broadcast Audio Options

- **Audio Language** (digital channels only): Change the default value for audio languages.

 The available language may differ depending on the broadcast.

- **Multi-Track Sound (MTS)** 

(analog channels only)

- **Mono**: Choose for channels that are broadcasting in mono or if you are having difficulty receiving a stereo signal.
- **Stereo**: Choose for channels that are broadcasting in stereo.
- **SAP**: Choose to listen to the Separate Audio Program, which is usually a foreign-language translation.



 Depending on the particular program being broadcast, you can listen to **Mono**, **Stereo** or **SAP**.

SPDIF Output

SPDIF (Sony Philips Digital Interface) is used to provide digital sound, reducing interference going to speakers and various digital devices such as an A/V Receiver/Home theater.

- **Audio Format**: You can select the Digital Audio output (SPDIF) format.

 The available Digital Audio output (SPDIF) format may differ depending on the input source.

- **Audio Delay**: Correct audio-video sync problems, when watching TV or video, and when listening to digital audio output using an external device such as an AV receiver (0ms ~ 250ms).

Speaker Settings

- **Speaker Select (External Speaker / TV Speaker)**: A sound echo may occur due to a difference in decoding speed between the main speaker and the audio receiver. In this case, set the TV to **External Speaker**.

 When **Speaker Select** is set to **External Speaker**, the volume and MUTE buttons will not operate and the sound settings will be limited.

 When **Speaker Select** is set to **External Speaker**.

- **TV Speaker**: Off, **External Speaker**: On

 When **Speaker Select** is set to **TV Speaker**.

- **TV Speaker**: On, **External Speaker**: On

 If there is no video signal, both speakers will be mute.

- **Auto Volume (Off / Normal / Night)**: To equalize the volume level on each channel, set to **Normal**.

Night: This mode provides an improved sound experience compared to **Normal** mode, making almost no noise. It is useful at night.

Reset Sound (OK / Cancel)

Reset all sound settings to the factory defaults.

Setting the Time

 MENU  → System → Time → ENTER 

Time

- **Clock**: Setting the clock is for using various timer features of the TV.

 The current time will appear every time you press the **INFO** button.

 If you disconnect the power cord, you have to set the clock again.

Clock Mode (Auto / Manual)

- **Auto**: Set the current time automatically using the time from a digital channel.

 The antenna must be connected in order to set the time automatically.

- **Manual**: Set the current time manually.

 Depending on the broadcast station and signal, the auto time set up may not be correct. In this case, set the time manually.

Clock Set: Set the **Day**, **Month**, **Year**, **Hour**, **Minute** and **am/pm**.

 Available only when **Clock Mode** is set to **Manual**.

 You can set the **Day**, **Month**, **Year**, **Hour** and **Minute** directly by pressing the number buttons on the remote control.

Basic Features

Time Zone: Select your time zone.

 This function is only available when the **Clock Mode** is set to **Auto**.

Using the Sleep Timer

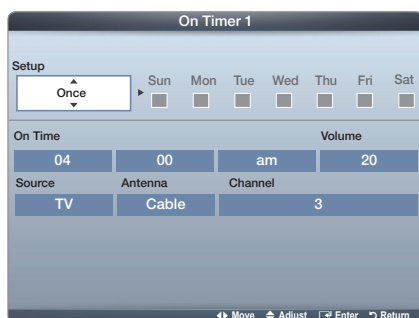
- **Sleep Timer** : Automatically shuts off the TV after a preset period of time. (30, 60, 90, 120, 150 and 180 minutes).

 To cancel the **Sleep Timer**, select **Off**.

Setting the On / Off Timer

You can set the TV to turn on automatically at a preset time.

- **On Timer 1 / On Timer 2 / On Timer 3:** Three different on timer settings can be made. You must set the clock first.



The screen shows the 'On Timer 1' setup interface. At the top, there's a 'Setup' section with a dropdown menu set to 'Once' and a row of checkboxes for days of the week (Sun, Mon, Tue, Wed, Thu, Fri, Sat). Below this is the 'On Time' section with fields for hour (04), minute (00), and time of day (am). The 'Volume' section has a field set to 20. The 'Source' section has a dropdown set to 'TV'. The 'Antenna' section has a dropdown set to 'Cable'. The 'Channel' section has a field set to 3. At the bottom, there are navigation buttons: Move, Adjust, Enter, and Return.

Setup: Select **Off**, **Once**, **Everyday**, **Mon~Fri**, **Mon~Sat**, **Sat~Sun** or **Manual** to set at you convenience. If you select **Manual**, you can set up the day you want to activate the timer.

 The  mark indicates the day is selected.

On Time: Set the hour, minute, and am/pm.

Volume: Set the desired volume level.

Source: Select **TV** or **USB** content to be played when the TV is turned on automatically. (**USB** can be selected only when a USB device is connected to the TV)

Antenna (when the **Source** is set to **TV**): Select **Air** or **Cable**.

Channel (when the **Source** is set to **TV**): Select the desired channel.

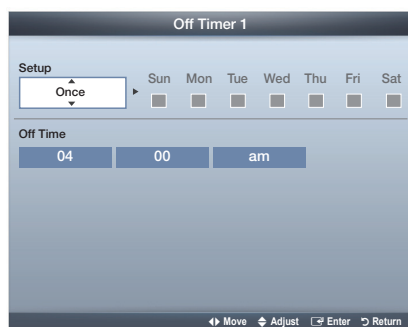
Music (when the **Source** is set to **USB**): Select a folder in the USB device containing music files to be played when the TV is turned on automatically.

Photos (when the **Source** is set to **USB**): Select a folder in the USB device containing photo files to be played when the TV is turned on automatically.

NOTE

- If there is no music file on the USB device or the folder containing a music file is not selected, the Timer function does not operate correctly.
- When there is only one photo file in the USB, the Slide Show will not play.
- If a folder name is too long, the folder cannot be selected.
- Each USB you use is assigned its own folder. When using more than one of the same type of USB, make sure the folders assigned to each USB have different names.
- It is recommended that you use a USB memory stick and a multi card reader when using **On Timer**. The **On Timer** function may not work with USB devices with a built-in battery, MP3 players, or PMPs made by some manufacturers because these devices take a long time to be recognized.

- **Off Timer 1 / Off Timer 2 / Off Timer 3:** Three different off timer settings can be made. You must set the clock first.



The screen shows the 'Off Timer 1' setup interface. At the top, there's a 'Setup' section with a dropdown menu set to 'Once' and a row of checkboxes for days of the week (Sun, Mon, Tue, Wed, Thu, Fri, Sat). Below this is the 'Off Time' section with fields for hour (04), minute (00), and time of day (am). At the bottom, there are navigation buttons: Move, Adjust, Enter, and Return.

Setup: Select **Off**, **Once**, **Everyday**, **Mon~Fri**, **Mon~Sat**, **Sat~Sun** or **Manual** to set at you convenience. If you select **Manual**, you can set up the day you want to activate the timer.

 The  mark indicates the day is selected.

Off Time: Set the hour, minute, and am/pm.

Basic Features

Locking Programs

 MENU  → System → Security → ENTER 

Security

-  The PIN input screen appears, Enter your 4 digit PIN number.
-  The default PIN number of a new TV set is "0-0-0-0".
- **Channel Lock (Off / On):** Lock channels, to prevent unauthorized users, such as children, from watching unsuitable program.
 -  Available only when the Input **Source** is set to **TV**.
- **Program Rating Lock:** Prevent unauthorized users, such as children, from watching unsuitable program with a user-defined 4-digit PIN code. If selected channel is locked, the "🔒" symbol will be displayed.

Allow All: Unlock All TV ratings.
- **Change PIN:** The Change PIN screen will appear. Choose any 4 digits for your PIN and enter them. As soon as the 4 digits are entered, the **Confirm New PIN** screen appears. Re-enter the same 4 digits. When the Confirm screen disappears, your PIN has been memorized.
 -  If you forget the PIN, press the remote-control buttons in the following sequence, which resets the pin to "0-0-0-0": **POWER** (off) → **MUTE** → 8 → 2 → 4 → **POWER** (on).

Economical Solutions

 MENU  → System → Eco Solution → ENTER 

Eco Solution

- **Energy Saving (Off / Low / Medium / High / Picture Off) (TOOLS ):** This adjusts the brightness of the TV in order to reduce power consumption. If you select **Picture Off**, the screen is turned off, but the sound remains on. Press any button except volume button to turn on the screen.

- **No Signal Power Off (Off / 15 min. / 30 min. / 60 min.):** To avoid unnecessary energy consumption, set how long you want the TV to remain on if it's not receiving a signal.
 -  Disabled when the PC is in power saving mode.
- **Auto Power Off (Off / On):** Saves power by turning TV off automatically when no user operation is received for 4 hours.

Other Features

 MENU  → System → ENTER 

Menu Language

Set the menu language.

1. Select **Menu Language** and press the ENTER  button.
2. Choose desired language and press the ENTER  button.

Caption

(On-Screen Text Messages)

- **Caption (Off / On):** You can switch the caption function on or off. If captions are not available, they will not be displayed on the screen.
 -  The Caption feature doesn't work in Component, HDMI or PC modes.
- **Caption Mode:** You can select the desired caption mode.
 -  The availability of captions depends on the program being broadcast.



CC1~CC4 / Text1~Text4: (analog channels only) The Analog Caption function operates in either analog TV channel mode or when a signal is supplied from an external device to the TV. (Depending on the broadcasting signal, the Analog Caption function may or may not work with digital channels.)

Auto Protection Time

- **Off / 2 hours / 4 hours / 8 hours / 10 hours:** If the screen remains idle with a still image for a certain period of time defined by the user, the screen saver is activated to prevent the formation of ghost images on the screen.

Basic Features

General

- **Max. Power Saving (Off / On):** Turn off PC monitor when PC is not used for certain length of time to reduce power consumption.

 Available only **PC** mode.

- **Game Mode (Off / On):** When connecting to a game console such as PlayStation™ or Xbox™, you can enjoy a more realistic gaming experience by selecting the game menu.

NOTE

- Precautions and limitations for game mode
 - To disconnect the game console and connect another external device, set **Game Mode** to **Off** in the setup menu.
 - If you display the TV menu in **Game Mode**, the screen shakes slightly.
- **Game Mode** is not available when the input source is set to TV or PC.
- After connecting the game console, set **Game Mode** to **On**. Unfortunately, you may notice reduced picture quality.
- If **Game Mode** is **On**:
 - **Picture** mode is set to **Standard** and **Sound** mode is set to **Movie**.

- **Menu Transparency (Bright / Dark):** Set the Transparency of the menu.

- **Boot Logo (Off / On):** Display Samsung logo when the TV is turned on.

- **AV Color System (Auto / PAL-M / PAL-N / NTSC):** Normally the TV can receive image and sound with good quality when in the mode **Auto**. This mode detects the signal color system automatically. In case of some signal reception with color unsatisfactory, select the **AV Color System** mode to **Auto**, **PAL-M**, **PAL-N** or **NTSC**.

Anynet+ (HDMI-CEC)

For details on set up options, refer to the "Anynet+ (HDMI-CEC)" instructions.

DivX® Video On Demand

Shows the registration code authorized for the TV. If you connect to the DivX web site and register, you can download the VOD registration file. If you play the VOD registration using **My Contents**, the registration is completed.

 For more information on DivX® VOD, visit "http://vod.divx.com".

Picture In Picture (PIP)

 MENU  → **System** → **PIP** → ENTER 

PIP

You can watch the TV tuner and one external video source simultaneously. **PIP** (Picture-in-Picture) does not function in the same mode.

NOTE

- For PIP sound, refer to the **Sound Select** instructions.
- If you turn the TV off while watching in **PIP** mode, the PIP window will disappear.
- You may notice that the picture in the PIP window becomes slightly unnatural when you use the main screen to view a game or karaoke.
- While **Program Rating Lock** is in operation, the PIP function cannot be used.
- PIP Settings

Main picture	Sub picture
Component, HDMI1/DVI, HDMI2, PC	TV

- **PIP (Off / On):** Activate or deactivate the PIP function.
- **Air/Cable (Air / Cable):** Select either **Air** or **Cable** as the input source for the sub-screen.
- **Channel:** Select the channel for the sub-screen.
- **Size ( / ):** Select a size for the sub-picture.
- **Position ( /  /  / ):** Select a position for the sub-picture.
- **Sound Select (Main / Sub):** You can choose the desired sound (**Main / Sub**) in **PIP** mode.

Basic Features

Support Menu

 MENU  → Support → ENTER 

Self Diagnosis

 **Self Diagnosis** might take few seconds, this is part of the normal operation of the TV.

■ Picture Test: Use to check for picture problems.

Yes: If the test pattern does not appear or there is noise in the test pattern, select **Yes**. There may be a problem with the TV. Contact Samsung's Call Center for assistance.

No: If the test pattern is properly displayed, select **No**. There may be a problem with your external equipment. Please check your connections. If the problem persists, refer to the external device's user manual.

■ Sound Test: Use the built-in melody sound to check for sound problems.

 If you hear no sound from the TV's speakers, before performing the sound test, make sure **Speaker Select** is set to **TV Speaker** in the **Sound** menu.

 The melody will be heard during the test even if **Speaker Select** is set to **External Speaker** or the sound is muted by pressing the **MUTE** button.

Yes: If you can hear sound only from one speaker or not at all during the sound test, select **Yes**. There may be a problem with the TV. Contact Samsung's Call Center for assistance.

No: If you can hear sound from the speakers, select **No**. There may be a problem with your external equipment. Please check your connections. If the problem persists, refer to the external device's user manual.

■ Signal Information: (digital channels only) An HD channel's reception quality is either perfect or the channels are unavailable. Adjust your antenna to increase signal strength.

■ Troubleshooting: If the TV seems to have a problem, refer to this description.

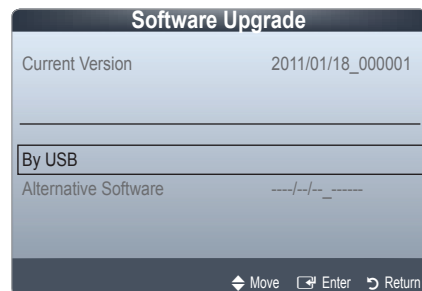
 If none of these troubleshooting tips apply, contact the Samsung customer service center.

Software Upgrade

Software Upgrade can be performed downloading the latest firmware from "www.samsung.com," to a USB memory device.

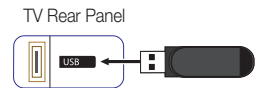
Current Version - the software already installed in the TV.

 Software is represented as "Year/Month/Day_Version."



Installing the Latest Version

■ **By USB:** Insert a USB drive containing the firmware upgrade file, downloaded from "www.samsung.com," into the TV. Please be careful not to disconnect the power or remove the USB drive until upgrades are complete. The TV will be turned off and on automatically after completing the firmware upgrade. When software is upgraded, video and audio settings you have made will return to their default settings. We advise you to write down your settings so that you can easily reset them after the upgrade.



■ **Alternative Software (backup):** If there is an issue with the new firmware and it is affecting operation, you can change the software to the previous version.

 If the software was changed, existing software is displayed.

Contact Samsung

View this information when your TV does not work properly or when you want to upgrade the software. You can find information regarding our call centers and how to download products and software.

Advanced Features

Using the My Contents

Enjoy photos, music and/or movie files saved on a USB Mass Storage Class (MSC)

1. Press the **CONTENT** button.
2. Press the **▲ / ▼ / ◀ / ▶** button to select desired menu (**Videos**, **Photos**, **Music**), then press the **ENTER** button.



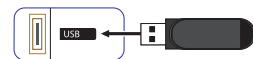
CONTENT → **My Contents** → **ENTER**



Connecting a USB Device

1. Turn on your TV.
2. Connect a USB device containing photo, music and/or movie files to the **USB 1** port on the back or side panel of the TV.
3. When a USB device is connected to the TV, the **Connected Device** window appears. Select a connected device, and then press **ENTER**.

TV Rear Panel



It might not work properly with unlicensed multimedia files.

Need-to-Know List before using **My Contents** with a USB device

- MTP (Media Transfer Protocol) is not supported.
- The file system supports FAT16, FAT32 and NTFS.
- Certain types of USB Digital camera and audio devices may not be compatible with this TV.
- **My Contents** with a USB device only supports USB Mass Storage Class (MSC) devices. MSC is a Mass Storage Class Bulk-Only Transport device. Examples of MSC are Thumb drives, Flash Card Readers and USB HDD (USB HUB are not supported). Devices should be connected directly to the TV's USB port.
- USB (HDD) is not supported.
- Before connecting your device to the TV, please back up your files to prevent them from damage or loss of data. SAMSUNG is not responsible for any data file damage or data loss.
- Do not disconnect the USB device while it is loading.
- The higher the resolution of the image, the longer it takes to display on the screen.
- The maximum supported JPEG resolution is 15360X8640 pixels.
- For unsupported or corrupted files, the "Not Supported File Format" message is displayed.
- If the files are sorted by Basic View, up to 1000 files can be displayed in each folder.
- MP3 files with DRM that have been downloaded from a non-free site cannot be played. Digital Rights Management (DRM) is a technology that supports the creation of content, the distribution and management of the content in an integrated and comprehensive way, including the protection of the rights and interests of the content providers, the prevention of the illegal copying of contents, as well as managing billings and settlements.
- If an over-power warning message is displayed while you are connecting or using a USB device, the device may not be recognized or may malfunction.
- If the TV has been no input during time set in **Auto Protection Time**, the Screensaver will run.

Advanced Features

- The power-saving mode of some external hard disk drives may be released automatically when connected to the TV.
- If a USB extension cable is used, the USB device may not be recognized or the files on the device may not be read.
- If a USB device connected to the TV is not recognized, the list of files on the device is corrupted or a file in the list is not played, connect the USB device to a PC, format the device and check the connection.
- If a file deleted from the PC is still found when **My Contents** with a USB device is run, use the “Empty the Recycle Bin” function on the PC to permanently delete the file.
- **My Contents** only supports sequential jpeg format.
- The scene search and thumbnail functions are not supported in the **Videos**.

Screen Display

Move to the desired file using the ◀ / ▶ / ▲ / ▼ buttons and then press the ENTER (⏏) or ▶ (Play) button. The file is played. **My Contents** screen may differ depending on the way you enter the screen.

Information:
Displays the selected content category (Music, for example), device (USB drive, for example), folder/file name, page, and sort criteria.



File List Section:
Displays files or folders sorted by criteria you can select.

Contents mode / Device name:
You can select the desired Content Category or Device.

Operation Buttons

- **Yellow (Edit Mode):** Lets you select music by checking the files you want to play. Only available in **Music**.
- **Blue (Sorting):** Selects the sort list.
- **◀▶ / ⏮⏭ (Page):** Move to next or previous page.
- **Tools:** Displays the option menu.
- **Return:** Move to the previous step.

Videos

Playing Video

1. Press the ◀ / ▶ / ▲ / ▼ button to select the desired video in the file list.
2. Press the ENTER (⏏) button or ▶ (Play) button.
 - The selected file is displayed on the top with its playing time.
 - If video time information is unknown, play time and progress bar are not displayed.
 - During playing the video, you can search using the ◀ and ▶ button.
 - You can use (⏮) (REW) and (⏭) (FF) buttons during playback.

In this mode, you can enjoy movie clips contained on a Game, but you cannot play the Game itself.

- Supported Subtitle Formats

Name	File extension	Format
MPEG-4 time-based text	.txt	XML
SAMI	.smi	HTML
SubRip	.srt	string-based
SubViewer	.sub	string-based
Micro DVD	.sub or .txt	string-based



- The displayed image may differ depending on the model.

Advanced Features

• Supported Video Formats

File Extension	Container	Video Codec	Resolution	Frame rate (fps)	Bit rate (Mbps)	Audio Codec
*.avi *.mkv	AVI MKV	Divx 3.11 / 4.x / 5.1 / 6.0	1920x1080	6 ~ 30	8	MP3 / AC3 / LPCM / ADPCM / DTS Core
		XviD	1920x1080	6 ~ 30	8	
		H.264 BP / MP / HP	1920x1080	6 ~ 30	25	
		MPEG4 SP / ASP	1920x1080	6 ~ 30	8	
		Motion JPEG	640x480	6 ~ 30	8	
*.asf	ASF	Divx 3.11 / 4.x / 5.1 / 6.0	1920x1080	6 ~ 30	8	MP3 / AC3 / LPCM / ADPCM / WMA
		XviD	1920x1080	6 ~ 30	8	
		H.264 BP / MP / HP	1920x1080	6 ~ 30	25	
		MPEG4 SP / ASP	1920x1080	6 ~ 30	8	
		Motion JPEG	640x480	6 ~ 30	8	
*.wmv	ASF	Window Media Video v9	1920x1080	6 ~ 30	25	WMA
*.mp4	MP4	H.264 BP / MP / HP	1920x1080	6 ~ 30	25	MP3 / ADPCM / AAC
		MPEG4 SP / ASP	1920x1080	6 ~ 30	8	
		XVID	1920x1080	6 ~ 30	8	
*.3gp	3GPP	H.264 BP / MP / HP	1920x1080	6 ~ 30	25	ADPCM / AAC / HE-AAC
		MPEG4 SP / ASP	1920x1080	6 ~ 30	8	
*.vro *.vob	VRO VOB	MPEG1	1920x1080	24 / 25 / 30	30	AC3 / MPEG / LPCM
		MPEG2	1920x1080	24 / 25 / 30	30	
*.mpg *.mpeg	PS	MPEG1	1920x1080	24 / 25 / 30	30	AC3 / MPEG / LPCM / AAC
		MPEG2	1920x1080	24 / 25 / 30	30	
		H.264	1920x1080	6 ~ 30	25	
*.ts *.tp *.trp	TS	MPEG2	1920x1080	24 / 25 / 30	30	AC3 / AAC / MP3 / DD+ / HE-AAC
		H.264	1920x1080	6 ~ 30	25	
		VC1	1920x1080	6 ~ 30	25	

Other Restrictions



NOTE

- If there are problems with the contents of a codec, the codec will not be supported.
- If the information for a Container is incorrect and the file is in error, the Container will not be able to play correctly.
- Sound or video may not work if the contents have a standard bitrate/frame rate above the compatible Frame/sec listed in the table above.
- If the Index Table is in error, the Seek (Jump) function is not supported.
- The menu may take longer to appear if the video's bit rate exceeds 10Mbps.
- Some USB/digital camera devices may not be compatible with the player.

Video Decoder	Audio Decoder
• Supports up to H.264, Level 4.1 • H.264 FMO / ASO / RS, VC1 SP / MP / AP L4 and AVCHD are not supported. • XVID, MPEG4 SP, ASP: – Below 1280 x 720: 60 frame max – Above 1280 x 720: 30 frame max • GMC is not supported.	• Supports up to WMA 7, 8, 9, STD • WMA 9 PRO does not support 2 channel excess multi channel or lossless audio. • WMA sampling rate 22050Hz mono is not supported.

Advanced Features

Playing movie continuously (Resume Play)

If you exit the playing movie function, the movie can be played later from the point where it was stopped.

1. Select the movie file you want to play continuously by pressing the ◀ or ▶ button to select it from the file list section.
2. Press the ▶ (Play) / ENTER button.
3. Select **Play Continuously** (Resume Play) by pressing the **D** button. The Movie will begin to play from where it was stopped.

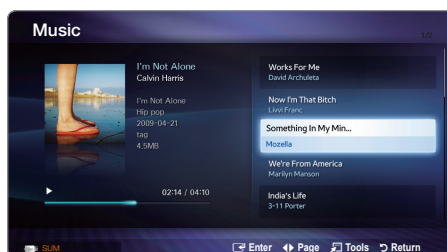
✎ The **D** button is available when resuming play.



Music

Playing Music

1. Press the ◀ / ▶ / ▲ / ▼ button to select the desired **Music** file in the file list.
 2. Press the ENTER button or ▶ (Play) button.
 - You can use ◀◀ (REW) and ▶▶ (FF) buttons during playback.
- ✎ Only displays the files with MP3 and PCM file extension. Other file extensions are not displayed, even if they are saved on the same USB device.
- ✎ If the sound is strange when playing MP3 files, adjust the **Equalizer** in the **Sound** menu. (An over-modulated MP3 file may cause a sound problem.)



- The displayed image may differ depending on the model.

Playing selected music

1. Press the **C** (Edit Mode) button.
2. Select the desired music by pressing ENTER button.
 - ✎ The ✓ mark appears to the left of the selected files.
3. Press the **TOOLS** button and select **Play Selected Contents**.
 - ✎ You can select or deselect all music by pressing the **Select All** / **Deselect All**.

Advanced Features

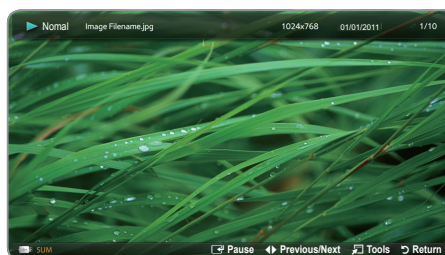
Photos

Viewing a Photo (or Slide Show)

1. Press the ◀ / ▶ / ▲ / ▼ button to select the desired file in the file list.
2. Press the ENTER button.
 - When a selected photo is displayed, press the ENTER button to start the slide show.
 - During the slide show, all files in the file list will be displayed in order.
 - When you press the ▶ (Play) button in the file list, the slide show will be started immediately.

🔗 Music files can be automatically played during the Slide Show if the **Background Music** is set to **On**.

🔗 The **Background Music (BGM) Mode** cannot be changed until the BGM has finished loading.



Videos/Music/Photos Play Option menu

During playing a file, press the TOOLS button.

Category	Operation	Videos	Music	Photos
Title Search	You can move the other file directly.	▼		
Time Search	You can search the video using ◀ and ▶ button at one minute interval or entering the number directly.	▼		
Shuffle Mode	You can play the music randomly.		▼	
Repeat Mode	You can play movie and music files repeatedly.	▼	▼	
Picture Size	You can adjust the picture size to your preference.	▼		
Picture Mode	You can adjust the picture setting.	▼		▼
Sound Mode	You can adjust the sound setting.	▼	▼	▼
Subtitle Language	You can view a subtitle. You can select a specific language if the subtitle file contains multiple languages.	▼		
Subtitle Setting	You can play the video with Subtitles. This function only works if the subtitles are the same file name as the video.	▼		
Audio	You can enjoy video in one of supported languages as required. The function is only enabled when stream-type files which support multiple audio formats are played.	▼		
Start Slide Show / Pause Slide Show	You can start or pause a Slide Show.			▼
Slide Show Speed	You can select the slide show speed during the slide show.			▼
Background Music	You can on/off background music when watching a Slide Show.			▼
Background Music Setting	You can select background music when watching a Slide Show.			▼
Zoom	You can zoom into images in full screen mode.			▼
Rotate	You can rotate images in full screen mode.			▼
Information	You can see detailed information about the played file.	▼	▼	▼

🔗 Pressing the INFO button while a device name is selected will display information about the selected device name.

🔗 Pressing the INFO button while a file is selected will display information about the selected file.

Advanced Features

Anynet+ (HDMI-CEC)

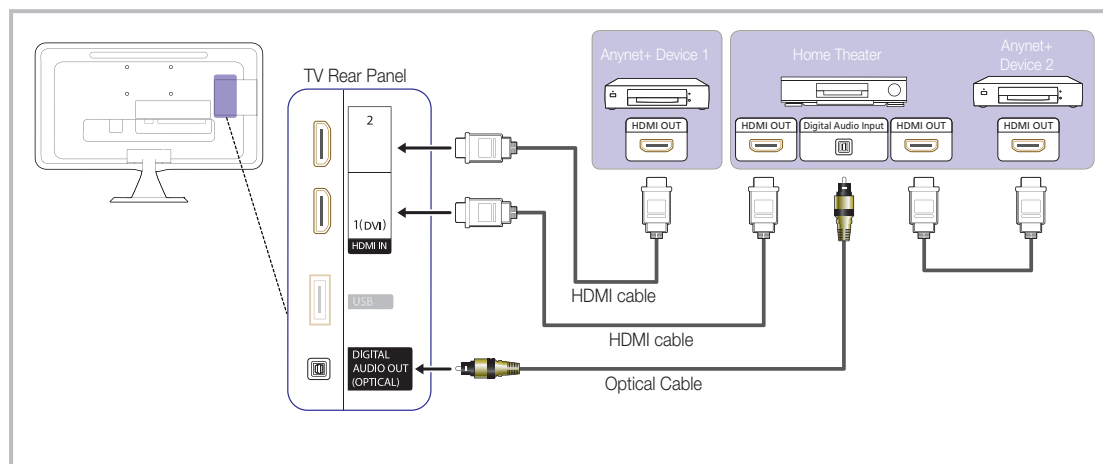
What is Anynet+?

Anynet+ is a function that enables you to control all connected Samsung devices that support Anynet+ with your Samsung TV's remote. The Anynet+ system can be used only with Samsung devices that have the Anynet+ feature. To be sure your Samsung device has this feature, check if there is an Anynet+ logo on it.

NOTE

- You can only control Anynet+ devices using the TV remote control, not the buttons on the TV.
- The TV remote control may not work under certain conditions. If this occurs, reselect the Anynet+ device.
- The Anynet+ functions do not operate with other manufacturers' products.
- For the method of connecting external devices, refer to the supported user manual.

To connect to a Samsung Home Theater



1. Connect the HDMI IN (1(DVI), 2) jack on the TV and the HDMI OUT jack of the corresponding Anynet+ device using an HDMI cable.
2. Connect the HDMI IN jack of the home theater and the HDMI OUT jack of the corresponding Anynet+ device using an HDMI cable.

NOTE

- Connect the Optical cable between the **DIGITAL AUDIO OUT (OPTICAL)** jack on your TV and the Digital Audio Input on the Home Theater.
- When following the connection above, the Optical jack only outputs 2 channel audio. You will only hear sound from the Home Theater's Front, Left and Right speakers and the subwoofer. If you want to hear 5.1 channel audio, connect the **DIGITAL AUDIO OUT (OPTICAL)** jack on the DVD / Satellite Box (i.e. Anynet Device 1 or 2) directly to the Amplifier or Home Theater, not the TV.
- You can connect only one Home Theater.
- You can connect an Anynet+ device using the HDMI cable. Some HDMI cables may not support Anynet+ functions.
- Anynet+ works when the AV device supporting Anynet+ is in the standby or on status.
- Anynet+ supports up to 10 AV devices in total. Note that you can connect up to 3 devices of the same type.

Advanced Features

Anynet+ Menu

The Anynet+ menu changes depending on the type and status of the Anynet+ devices connected to the TV.

Anynet+ Menu	Description
View TV	Changes Anynet+ mode to TV broadcast mode.
Device List	Shows the Anynet+ device list.
Recording: (*recorder)	Starts recording immediately using the recorder. (This is only available for devices that support the recording function.)
(device_name) MENU	Shows the connected device menus. E.g. If a DVD recorder is connected, the disc menu of the DVD recorder will appear.
(device_name) Tools	Shows the tools menu of the connected device. E.g. If a DVD recorder is connected, the play menu of the DVD recorder will appear.  Depending on the device, this menu may not be available.
(device_name) Title Menu	Shows the title menu of the connected device. E.g. If a DVD recorder is connected, the title menu of the DVD recorder will appear.  Depending on the device, this menu may not be available.
Stop Recording: (*recorder)	Stops recording.
Receiver	Sound is played through the receiver.

If more than one recording device is connected, they are displayed as (*recorder) and if only one recording device is connected, it will be represented as (*device_name).

Setting Up Anynet+



MENU  → System → Anynet+ (HDMI-CEC) → ENTER 

■ Anynet+ (HDMI-CEC) (Off / On)

To use the Anynet+ Function, **Anynet+ (HDMI-CEC)** must be set to **On**.

 When the **Anynet+ (HDMI-CEC)** function is disabled, all the Anynet+ related operations are deactivated.

■ Auto Turn Off (No / Yes):

Setting an Anynet+ Device to turn off automatically when the TV is turned off.

 If **Auto Turn Off** is set to **Yes**, running external devices will turn off at the same time as the TV powers off. However, a device may not turn off if recording is in progress.

 May not be enabled depending on the device.

Switching between Anynet+ Devices

1. Press the **TOOLS** button to select **Anynet+ (HDMI-CEC)**. And then press the **ENTER**  button to select **Device List**.

 If you cannot find a device you want, press the **A** button to refresh the list.

2. Select a device and press the **ENTER**  button. You can switch to the selected device.

 The **Device List** menu will only appear when you set **Anynet+ (HDMI-CEC)** to **On** in the **System** menu.

- Switching to the selected device may take up to 2 minutes. You cannot cancel the operation during the switching operation.
- If you have selected external input mode by pressing the **SOURCE** button, you cannot use the Anynet+ function. Make sure to switch to an Anynet+ device by using the **Device List**.

Advanced Features

Recording

You can make a recording of a TV Program using a Samsung recorder.

1. Select **Recording**.

-  When there are more than two recording devices
 - When multiple recording devices are connected, the recording devices are listed. Select one recording device in the **Device List**.
-  When the recording device is not displayed, select **Device List** and press the **A** button to search devices.

2. Press the **EXIT** button to exit.

-  You can record the source streams by selecting **Recording:** (device_name).
-  Pressing the  (REC) button will record whatever you are currently watching. If you are watching video from another device, the video from the device is recorded.
-  Before recording, check whether the antenna jack is properly connected to the recording device. To properly connect an antenna to a recording device, refer to the recording device's users manual.

Listening through a Receiver

You can listen to sound through a receiver (i.e Home Theater) instead of the **TV Speaker**.

1. Select **Receiver** and set to **On**.

2. Press the **EXIT** button to exit.

-  If your receiver supports audio only, it may not appear in the device list.
-  The receiver will work when you have properly connected the optical in jack of the receiver to the **DIGITAL AUDIO OUT (OPTICAL)** jack of the TV.
-  When the receiver (i.e Home Theater) is set to **On**, you can hear sound output from the TV's Optical jack. When the source is a digital component such as a DVD and is connected to the TV via HDMI, only 2 channel sound will be heard from the receiver.

Advanced Features

Troubleshooting for Anynet+

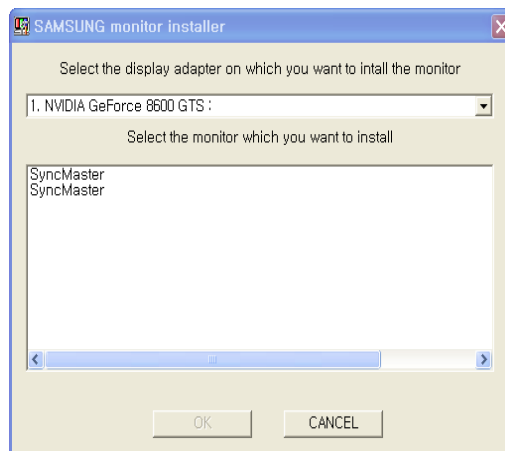
Problem	Possible Solution
Anynet+ does not work.	• Check if the device is an Anynet+ device. The Anynet+ system supports Anynet+ devices only. • Only one receiver (home theater) can be connected. • Check if the Anynet+ device power cord is properly connected. • Check the Anynet+ device's Video/Audio/HDMI cable connections. • Check whether Anynet+ (HDMI-CEC) is set to On in the Anynet+ setup menu. • Check whether the TV remote control is in TV mode. • Check whether the remote control is Anynet+ compatible. • Anynet+ doesn't work in certain situations. (Searching channels, operating My Contents or Plug & Play (initial setup), etc.) • When connecting or removing the HDMI cable, please make sure to search devices again or turn your TV off and on again. • Check if the Anynet+ Function of Anynet+ device is set on.
I want to start Anynet+.	• Check if the Anynet+ device is properly connected to the TV and check if the Anynet+ (HDMI-CEC) is set to On in the Anynet+ Setup menu. • Press the TOOLS button to display the Anynet+ menu and select a menu you want.
I want to exit Anynet+.	• Select View TV in the Anynet+ menu. • Press the SOURCE button on the TV remote control and select a non- Anynet+ device. • Press ✓ CH ▲, PRE-CH, and FAV.CH to change the TV mode. (Note that the channel button operates only when a tuner-embedded Anynet+ device is not connected.)
The message "Connecting to Anynet+ device..." appears on the screen.	• You cannot use the remote control when you are configuring Anynet+ or switching to a view mode. • Use the remote control after the TV has finished Anynet+ configuration or has finished switching to Anynet+.
The Anynet+ device does not play.	• You cannot use the play function when Plug & Play (initial setup) is in progress.
The connected device is not displayed.	• Check whether or not the device supports Anynet+ functions. • Check whether or not the HDMI cable is properly connected. • Check whether Anynet+ (HDMI-CEC) is set to On in the Anynet+ setup menu. • Search Anynet+ devices again. • You can connect an Anynet+ device using the HDMI cable only. Some HDMI cables may not support Anynet+ functions. • If connection is terminated because there has been a power interruption or the HDMI cable has been disconnected, please repeat the device scan.
The TV Program cannot be recorded.	• Check whether the antenna jack on the recording device is properly connected.
The TV sound is not output through the receiver.	• Connect the optical cable between TV and the receiver.

Other Information

Installing the Device Driver

 If you install the device driver, you can set up the appropriate resolution and frequency for the product. The device driver is included on the CD supplied with the product. If the supplied drive file is corrupted, please visit the Samsung Electronics website (www.samsung.com), and download the driver.

1. Insert the driver installation CD into the CD-ROM drive.
2. Click on Windows Driver.
3. Complete the remaining installation steps according to the instructions displayed on the screen.
4. Select the model of your product from the model list.



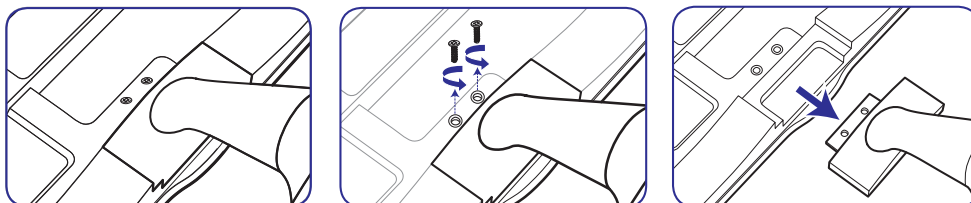
5. Check if the appropriate resolution and screen refresh rate are displayed in the Control Panel settings. For more information, refer to the document about the Windows operating system.

Other Information

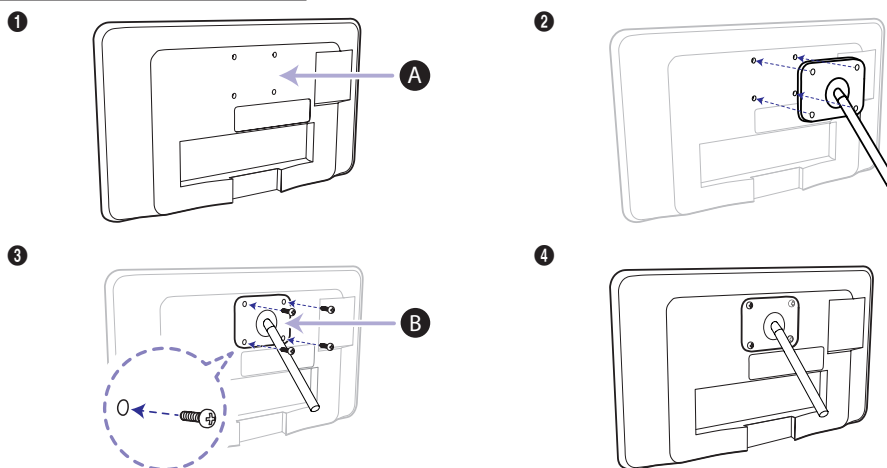
Attaching a Wall Mount/Desktop Stand

Preparing before installing Wall-Mount/Desktop Stand

1. Turn the product off and unplug the power cord from the wall outlet.
2. Place a soft cloth or cushion on a flat surface to protect the panel and place the product face down.
3. Separate the screw at the rear of the product.
4. Pull the stand in the direction of the arrow as shown in the figure to separate it.



Attaching a Wall Mount/Desktop Stand



- A** Wall/Desktop Stand Mount
B Wall mount kit/desktop stand (not supplied)

5. Align wall mount/desktop stand to the Monitor/TV and firmly fix the wall mount/desktop stand by fastening the screw.
6. Align the groove of the part of the product that is to be connected to the stand with the groove in the stand (desk-top stand, wall mount stand or another stand) and firmly fix the stand by fastening the screw.

NOTE

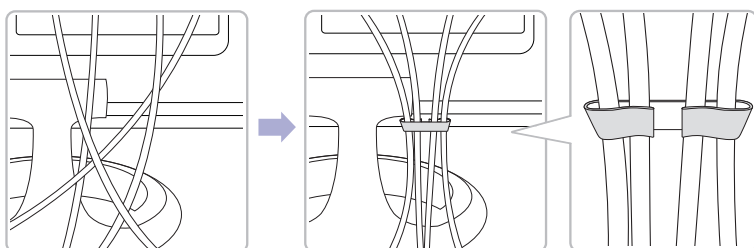
- If you use screws that are longer than the standard specifications, the inside of the product may be damaged.
- For wall mounts that are not compatible with the standard VESA specifications, the length of the screw may differ depending on the corresponding specifications.
- Avoid using screws that are incompatible with the standard VESA specifications and avoid assembling them using excessive force. This may result in damage to the product or injury due to the product falling. Samsung shall not be held liable for any damage or injury.

Other Information

- Samsung shall not be held liable for any damage to the product or injury caused by using a wall mount/desktop stand that is not compatible with the specifications or due to an installation not performed by an authorized installation engineer.
- When installing the product using a wall mount, purchase a wall mount that provides at least 10 cm (3.93 inches) of space from the wall.
- Use the wall mount according to the international specifications.

Assembling the Cables

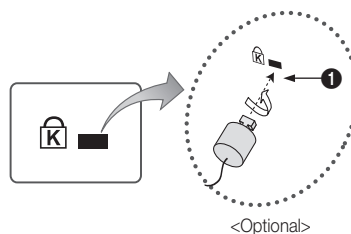
Use the Cable Holder to hide the cables behind the stand.



Anti-theft Kensington Lock

The Kensington Lock is not supplied by Samsung. It is a device used to physically fix the system when using it in a public place. The appearance and locking method may differ from the illustration depending on the manufacturer. Refer to the manual provided with the Kensington Lock for additional information on proper use.

- ✎ Please find a “K” icon on the rear of the TV. A kensington slot is beside the “K” icon.



To lock the product, follow these steps:

1. Wrap the Kensington lock cable around a large, stationary object such as desk or chair.
2. Slide the end of the cable with the lock attached through the looped end of the Kensington lock cable.
3. Insert the locking device into the Kensington slot on the product ❶.
4. Lock the lock.

- ✎ These are general instructions. For exact instructions, see the User manual supplied with the locking device.
- ✎ The locking device has to be purchased separately.
- ✎ The location of the Kensington slot may be different depending on the TV model.

Other Information

Troubleshooting

If the TV seems to have a problem, first try this list of possible problems and solutions. If none of these troubleshooting tips apply, visit "www.samsung.com," then click on Support, or contact a Samsung customer service center.

Issues	Solutions and Explanations
PC Connection	
A Mode Not Supported message appears.	Set your PC's output resolution so it match the resolutions supported by the TV (p. 19).
PC is always shown on the source list, even if a PC is not connected.	This is normal; "PC" is always shown on the source list, regardless of whether a PC is connected.
The video is OK but there is no audio.	If you are using an HDMI connection, check the audio output setting on your PC.
Poor picture	First of all, please perform the Picture Test and confirm that your TV is properly displaying the test image. (go to MENU - Support - Self Diagnosis - Picture Test) (p. 32) If the test image is properly displayed, the poor picture may be caused by the source or signal.
The TV image does not look as good as it did in the store.	- If you have an analog cable/satellite box, upgrade to an HD digital set top box. Use HDMI or Component cables to deliver HD (high definition) picture quality. - Cable/Satellite subscribers: Try HD stations from the channel line up. - Antenna connection: Try HD stations after performing Auto program. - Many HD channels are upscaled from SD(Standard Definition) contents. - Adjust the Cable/Sat box video output resolution to 1080i or 720p. - Make sure you are watching the TV at the minimum recommended distance based on the size and definition of the signal.
The picture is distorted: macroblock error, small block, dots, pixelization.	- Compression of video contents may cause picture distortion, especially in fast moving pictures such as sports and action movies. - Low signal level can cause picture distortion. This is not a TV problem. - Mobile phones used close to the TV (cca up to 1m) may cause noise in picture on analog and digital TV.
Color is wrong or missing.	If you're using Component connection, make sure the component cables are connected to the correct jacks. Incorrect or loose connections may cause color problems or a blank screen.
There is poor color or brightness.	- Adjust the Picture options in the TV menu (go to Picture mode / Color / Brightness / Sharpness) (p. 25) - Adjust Energy Saving option in the TV menu (go to MENU - System - Eco Solution - Energy Saving) (p.30) - Try resetting the picture to view the default picture settings (go to MENU - Picture - Reset Picture) (p. 27)
There is a dotted line on the edge of the screen.	- If the picture size is set to Screen Fit, change it to 16:9 (p.25). - Change cable/satellite box resolution.
The picture is black and white.	If you are using an AV composite input, connect the video cable (yellow) to the Green jack of component input 1 on the TV.
When changing channels, the picture freezes or is distorted or delayed.	- If connected to a cable box, please try to reset it. (reconnect the AC cord and wait until the cable box reboots. It may take up to 20 minutes) - Set the output resolution of the cable box to 1080i or 720p.
Sound Problem	
There is no sound or the sound is too low at maximum volume.	First of all, please perform the Sound Test to confirm that your TV audio is properly operating. (go to MENU - Support - Self Diagnosis - Sound Test) (p. 32) If the audio is OK, the sound problem may caused by the source or signal. Please check the volume of the device (Cable/Sat Box, DVD, Blu-ray etc) connected to your TV.
The picture is good but there is no sound.	- Set the Speaker Select option to TV Speaker in the Sound menu (p. 28). - If you are using an external device, make sure the audio cables are connected to the correct audio input jacks on the TV. - If you are using an external device, check the device's audio output option (ex. you may need to change your cable box's audio option to HDMI when you have a HDMI connected to your TV). - If you are using a DVI to HDMI cable, a separate audio cable is required. - If your TV has a headphone jack, make sure there is nothing plugged into it. - Reboot the connected device by reconnecting the device's power cable.

Other Information

Issues	Solutions and Explanations
The speakers are making an inappropriate noise.	- Check cable connections. Make sure a video cable is not connected to an audio input. - For antenna or Cable connections, check the signal strength. Low signal level may cause sound distortion. - Perform the Sound Test as explained above.
No Picture, No Video	
The TV won't turn on.	- Make sure the AC power cord is securely plugged in to the wall outlet and the TV. - Make sure the wall outlet is working. - Try pressing the POWER button on the TV to make sure the problem is not the remote. If the TV turns on, refer to "Remote control does not work" below.
The TV turns off automatically.	- Ensure the Sleep Timer is set to Off in the Setup menu (p. 29). - If your PC is connected to the TV, check your PC power settings. - Make sure the AC power cord is plugged in securely to the wall outlet and the TV. - When watching TV from an antenna or cable connection, the TV will turn off after 10 - 15 minutes if there is no signal.
There is no picture/video.	- Check cable connections (remove and reconnect all cables connected to the TV and external devices). - Set your external device's (Cable/Sat Box, DVD, Blu-ray etc) video outputs to match the connections to the TV input. For example, if an external device's output is HDMI, it should be connected to an HDMI input on the TV. - Make sure your connected devices are powered on. - Be sure to select the TV's correct source by pressing the SOURCE button on the remote control. - Reboot the connected device by reconnecting the device's power cable.
RF(Cable/Antenna) Connection	
The TV is not receiving all channels.	- Make sure the coaxial cable is connected securely. - Please try Auto Program to add available channels to the channel list. Go to MENU - Channel - Auto Program then select Auto and make sure the correct Cable TV signal type is set in the menu (p. 24). - Verify the Antenna is positioned correctly.
The picture is distorted: macroblock error, small block, dots, pixelization.	- Compression of video contents may cause picture distortion, especially with fast moving pictures such as sports and action movies. - A low signal can cause picture distortion. This is not a TV problem.
Others	
Purple/green rolling horizontal bars and buzzing noise from the TV speakers with Component cable connection.	Remove the left and right audio connections from the set-top-box. If the buzzing stops, this indicates that the set-top-box has a grounding issue. Replace the Component video cables with an HDMI connection.
A "Mode Not Supported" message appears.	Check the supported resolution of the TV, and adjust the external device's output resolution accordingly (p.19).
Caption on TV menu is greyed out.	Caption can not be selected in the TV menu when connected via HDMI or Component (p. 30). Caption must be activated on the external device (p. 30).
There is a plastic smell from the TV.	This smell is normal and will dissipate over time.
The TV Signal Information is unavailable in the Self Diagnostic Test menu.	This function is only available with digital channels from an Antenna / RF / Coax connection (p. 32).
The TV is tilted to the side.	Remove the base stand from the TV and reassemble it.
The channel menu is greyed out (unavailable).	The Channel menu is only available when the TV source is selected.
Your settings are lost after 30 minutes or every time the TV is turned off.	If the TV is in the Store Demo mode, it will reset audio and picture settings every 30 minutes. Change the settings from Store Demo mode to Home Use mode in the Plug & Play procedure. Press the SOURCE button to select TV mode, and go to MENU → System → Plug & Play → ENTER (p. 15).
You have intermittent loss of audio or video.	- Check the cable connections and reconnect them. - Loss of audio or video can be caused by using overly rigid or thick cables. Make sure the cables are flexible enough for long term use. If mounting the TV to a wall, we recommend using cables with 90 degree connectors.

Other Information

Issues	Solutions and Explanations
You see small particles when you look closely at the edge of the frame of the TV.	This is part of the product's design and is not a defect.
The PIP menu is not available.	PIP functionality is only available when you are using a HDMI, PC or Component source.

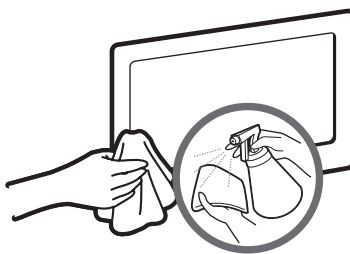
 This panel uses a panel consisting of sub pixels which require sophisticated technology to produce. However, there may be a few bright or dark pixels on the screen. These pixels will have no impact on the performance of the product.

Storage and Maintenance

 If you attached some stickers on the TV screen, it remains some debris after removing the sticker. Please clean it to watch TV.



Do not spray water or a cleaning agent directly onto the product. Any liquid that goes into the product may cause a failure, fire, or electric shock.



Clean the product with a soft cloth dipped in a small amount of water.

Other Information

License



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DivX Certified to play DivX video up to HD 1080p, including premium content.

ABOUT DIVX VIDEO: DivX® is a digital video format created by DivX, Inc. This is an official DivX Certified device that plays DivX video. Visit www.divx.com for more information and software tools to convert your files into DivX video.

ABOUT DIVX VIDEO-ON-DEMAND: This DivX Certified® device must be registered in order to play DivX Video-on-Demand (VOD) content.

To generate the registration code, locate the DivX VOD section in the device setup menu.

Go to vod.divx.com with this code to complete the registration process and learn more about DivX VOD. Pat. 7,295,673; 7,460,688; 7,519,274

Open source license notice

In the case of using open source software, Open Source License are available on the product menu.

Open Source Licence Notice is written only English.

Other Information

Specifications

Environmental considerations	Operating	Temperature : 50°F ~ 104°F (10°C ~ 40°C) Humidity : 10 % ~ 80 %, non-condensing			
	Storage	Temperature : -4°F ~ 113°F (-20°C ~ 45°C) Humidity : 5 % ~ 95 %, non-condensing			
VESA Mounting Interface		75 mm x 75 mm			
Tilt		-2° ~ 22°			
Model Name		T24A350	T22A550	T24A550	T27A550
Screen Size (Diagonal)		24 inches (61 cm)	21.5 inches (54 cm)	24 inches (61 cm)	27 inches (68 cm)
Display Resolution		1920 x 1080@60Hz	1920 x 1080@60 Hz	1920 x 1080@60 Hz	1920 x 1080@60 Hz
Power Consumption		35W	45W	55W	65W
Normal operation		< 0.3W	< 0.3W	< 0.3W	< 0.3W
Standby					
Sound (Output)		5W x 2	3W x 2	5W x 2	
Dimension (W x H x D)	(Without Stand)	578.6 x 359.1 x 33.2 mm	525.5 x 329.0 x 34.8 mm	581.4 x 360.5 x 32.7 mm	648.1 x 398.9 x 31.8 mm
	(With Stand)	578.6 x 444.6 x 239.2 mm	525.5 x 414.4 x 220.6 mm	581.4 x 446.1 x 220.6 mm	648.1 x 485.7 x 235.0 mm
Weight	(Without Stand)	4.2 kg	3.6 kg	4.3 kg	4.7 kg
	(With Stand)	4.8 kg	4.4 kg	5 kg	5.6 kg

- Design and specifications are subject to change without prior notice.
- For information about power supply, and more about power consumption, refer to the label attached to the product.
- Some models may not be available for purchase depending on the region.
- If there is no power cut-off switch, the power consumption is "0" only when the power cord is disconnected.
- DPM(Display Power Management) Function does not work if you used in conjunction with the HDMI IN 1(DVI) port of this product.

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